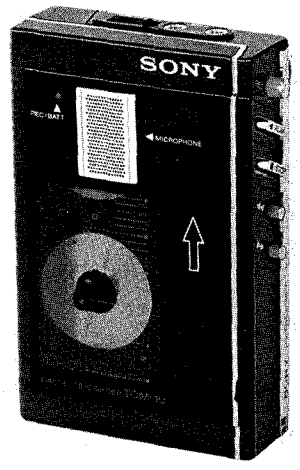
# TCM-10

# SERVICE MANUAL

*US Model*
*Canadian Model*
*AEP Model*
*UK Model*
*E Model*




## SPECIFICATIONS

| Tape Transport Mechanism Type | MT-10-26 |
|---|---|

| | |
|---|---|
| Recording system | 2-track 1-channel monaural |
| Speaker | Approx. 2.8 cm (1⅛ inches) dia. |
| Fast winding time | Approx. 2 min. 30 sec. with Sony C-60 cassette |
| Frequency response | 150–9,000 Hz |
| Input | Microphone input jack (minijack)<br>sensitivity 0.2 mV (–72 dB)<br>for low impedance microphone |
| Output | Earphone jack (minijack)<br>for 8-ohm earphone or load impedance<br>10 kilohms or higher |
| Power output | 70 mW (at 10% harmonic distortion) |
| Power requirements | 1.5 V dc<br>One battery size AA (IEC designation R6)<br>DC IN 1.5 V jack accepts;<br>optional Sony EBP-10 battery case for use on two batteries size AA (IEC designation R6)<br>optional Sony AC-D1 ac power adaptor for use on 120 V ac, 60 Hz (US, Canadian model)<br>optional Sony AC-D1 ac power adaptor for use on 220 V ac, 50 Hz (AEP model)<br>optional Sony AC-D1 ac power adaptor for use on 240 V ac, 50 Hz (UK model)<br>optional Sony AC-D1 ac power adaptor for use on 110, 120, 220 or 240 V ac adjustable, 50/60 Hz (E model)<br>optional Sony DCC-70 car battery cord for use on 12 V car battery |

Battery life

| Battery | Recording | Playback |
|---|---|---|
| Sony New Super SUM-3(NS) battery or Eveready No.1215 Heavy Duty battery | Approx. 2 | Approx. 2.5 |
| Sony Eveready AM3 Alkaline battery | Approx. 4 | Approx. 5 |

(hours)

| | |
|---|---|
| Dimensions | Approx. 81.4×109.9×24.9 mm (w/h/d) (3¼×4⅜×1 inches)<br>not incl. projecting parts and controls, with cassette inside<br>Approx. 86.5×111.8×27.9 mm (w/h/d) (3½×4½×1⅛ inches)<br>incl. projecting parts and controls, with cassette inside |
| Weight | Approx. 225 g (8.0 oz)<br>incl. battery, not incl. other accessories |

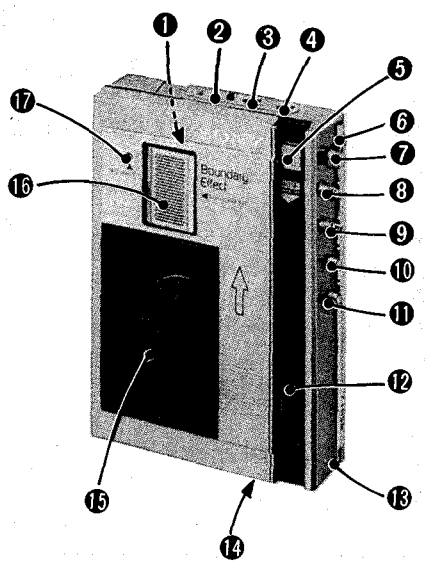
MICROFILM

CASSETTE CORDER

SONY®

TC

## PARTS IDENTIFICATION



❶ Speaker (rear)
❷ TAPE COUNTER and reset button
❸ EAR (earphone) jack
❹ MIC (microphone) jack
❺ ❚❚ PAUSE/POWER OFF switch
❻ VOL (volume) control
❼ REC (record) button
❽ ◀ PLAY (playback) button
❾ ■ STOP button
❿ ◀◀ (fast forward) button
⓫ ▶▶ (rewind) button
⓬ Battery compartment
⓭ Loop for hand strap
⓮ DC IN 1.5 V (external power input) jack (bottom)
⓯ Cassette compartment
⓰ MICROPHONE (built-in microphone)
⓱ REC/BATT (record/battery) indicator

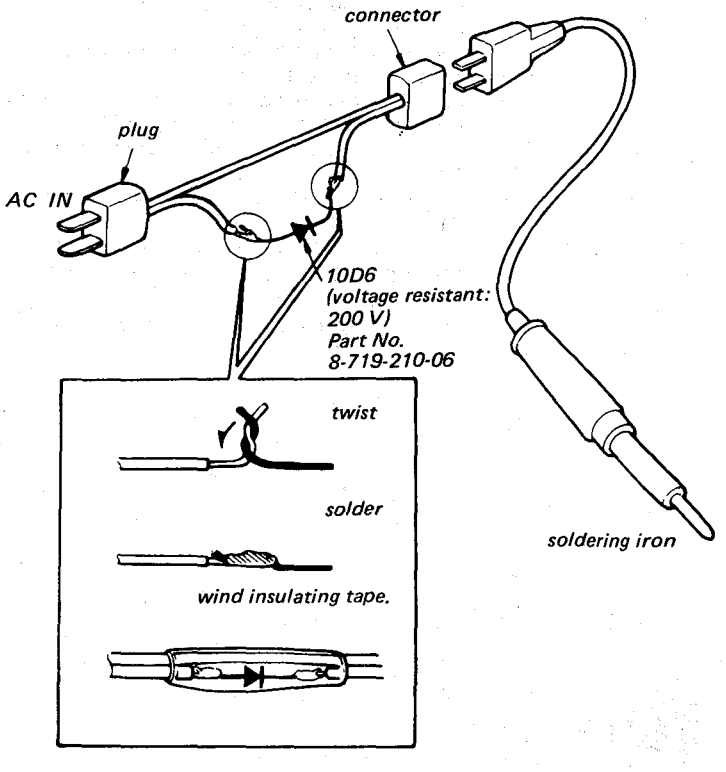
## SERVICING NOTE

### Flexible Circuit Board Repairing

1. Keep the temperature of the soldering iron at 270° ± 10°C during repairing.
   You can maintain the temperature of the soldering iron around 270°C by using the thermal controller as illustrated on the right.
2. Do not touch the soldering iron more than 4 seconds or 3 times on the same conductor of the circuit board.
3. Do not apply force on the conductor when soldering or unsoldering.

### Tip of soldering iron

### To make thermal controller of soldering iron



**Replacing chip components**

All chip components should be connected and disconnected, using a tapered soldering iron [temperature of the iron tip: less than 280°C (536°F)], a pair of tweezers and braided wire.

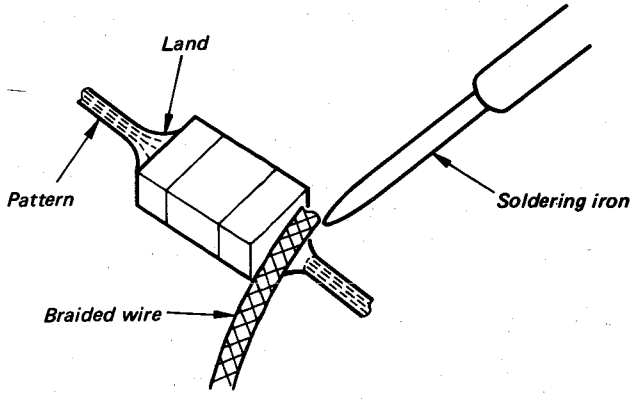
**Precautions for replacement**

1. **Do not disconnect the chip component forcefully. Otherwise, the pattern may peel off.**
2. **Never re-use a disconnected chip component. Dispose of all old chip components.**
3. **To protect the chip component, heating time for attaching the component should be within 3 seconds.**

○ **Removing chip components**

**(1) Removing solder at electrode**

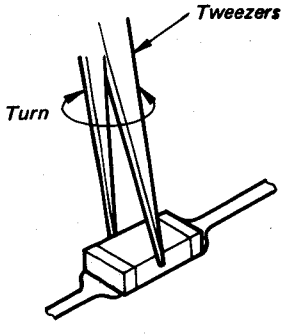
Remove the solder at the electrode, using a thin braided wire. Do not remove the solder of the part (chip component) attached adjacent to the electrode.




**(2) Disconnecting chip components**

Turn the tweezers with the soldering iron alternately applied to both electrodes, and the chip component will be disconnected. Take careful precautions while disconnecting, because if the chip component is forcefully removed the land may peel off.

Never re-use a disconnected chip component.




**(3) Smoothing the soldered surface**

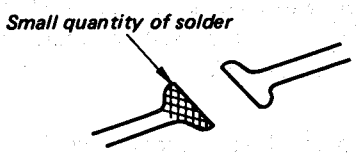
After disconnecting the chip component, remove the solder by using a braided wire to smooth the land surface.

○ **Connecting chip components**

The value of chip components is not displayed on the main body. Take due precautions to avoid mixing new chip components with other ones.

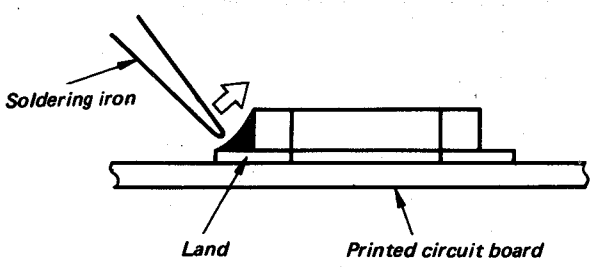
**(1) Applying solder to land on one side**

Apply a thin layer of solder to the land on one side where the chip component is to be connected. Too much solder may cause bridging.




**(2) Speedy soldering**

Hold the chip component at the desired position, using tweezers, and apply the soldering iron in the arrow-marked direction. To protect the chip component, heating time should be within 3 seconds.




**(3) Speedy soldering of electrode on the other side**

Solder the electrode on the other side in the same way as in (2) above.

## CIRCUIT DESCRIPTION

**Q119**

Q119 is ON in REC mode and reduces the voltage applied to terminal (10) of IC101. It prevents output signal from being distorted by large input signal.
As cathode of D103 is normally grounded via power switch, the based of Q120 to 122 are grounded when power switch is ON. Therefore, these are turned off. When power switch is OFF, Q120 to 122 are on and muting and switching operation are made because D103 is OFF.

**Q120**

Q120 is ON when power is OFF. So, terminal (10) of IC101 is grounded via Q120 and click noise is eliminated.

**Q122**

Q122 is ON when power is OFF. It shorts terminal (3) and (5) of IC102 and prevents signal from supplying to power amp.

**Q123**

Q123 is ON in FF/REW mode only. It feeds current to rotation detecting switch and operates auto-off circuit.

**Q121**

Q121 is ON only when power is OFF. It drops power voltage rapidly and prevents click noise.

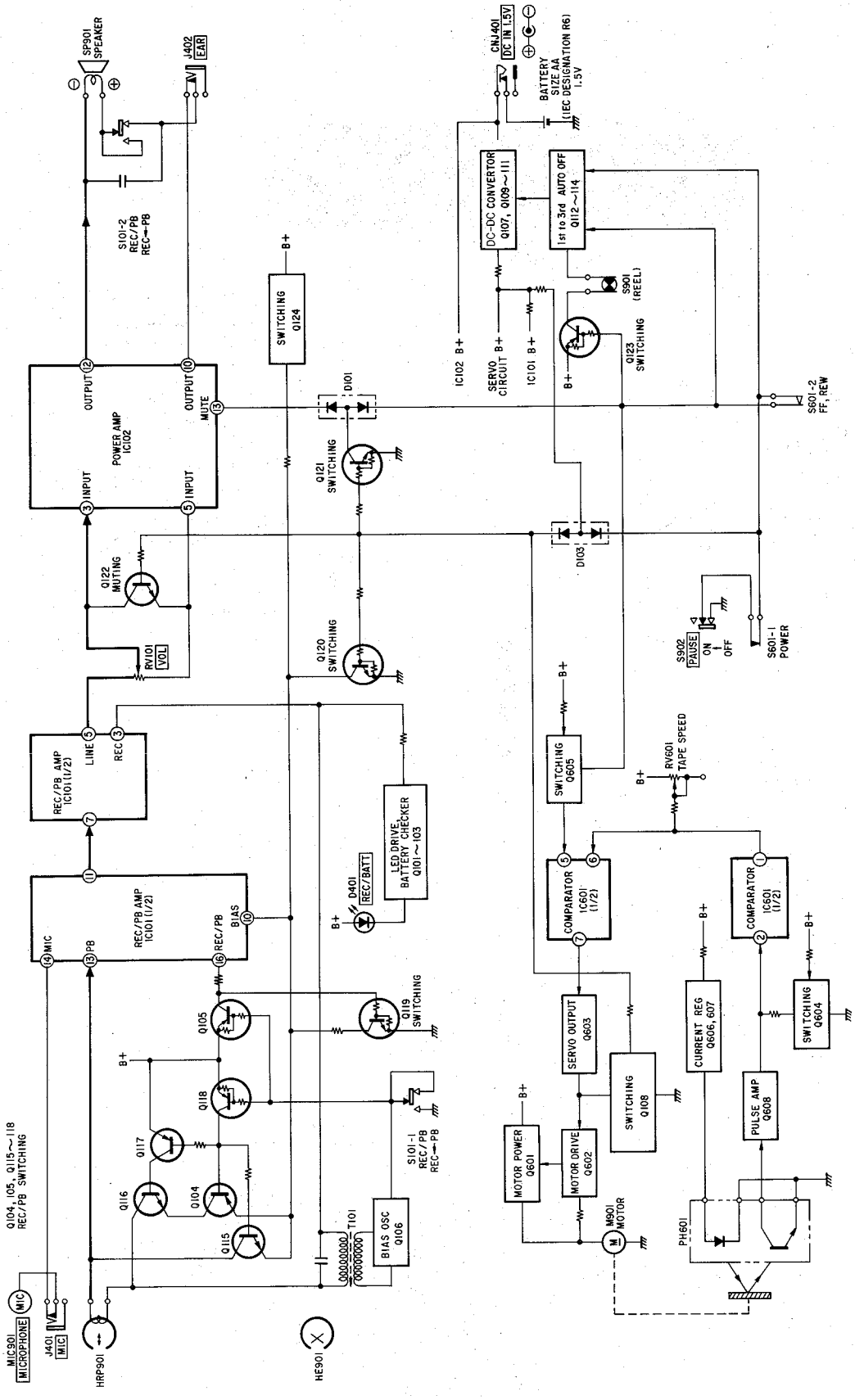
**Q604**

Q604 is OFF rapidly when power is OFF and prevents motor from rotating runaway.

## SERVICING NOTE

Chassis and cabinet are not grounded.
Be careful not to connect them with earth.

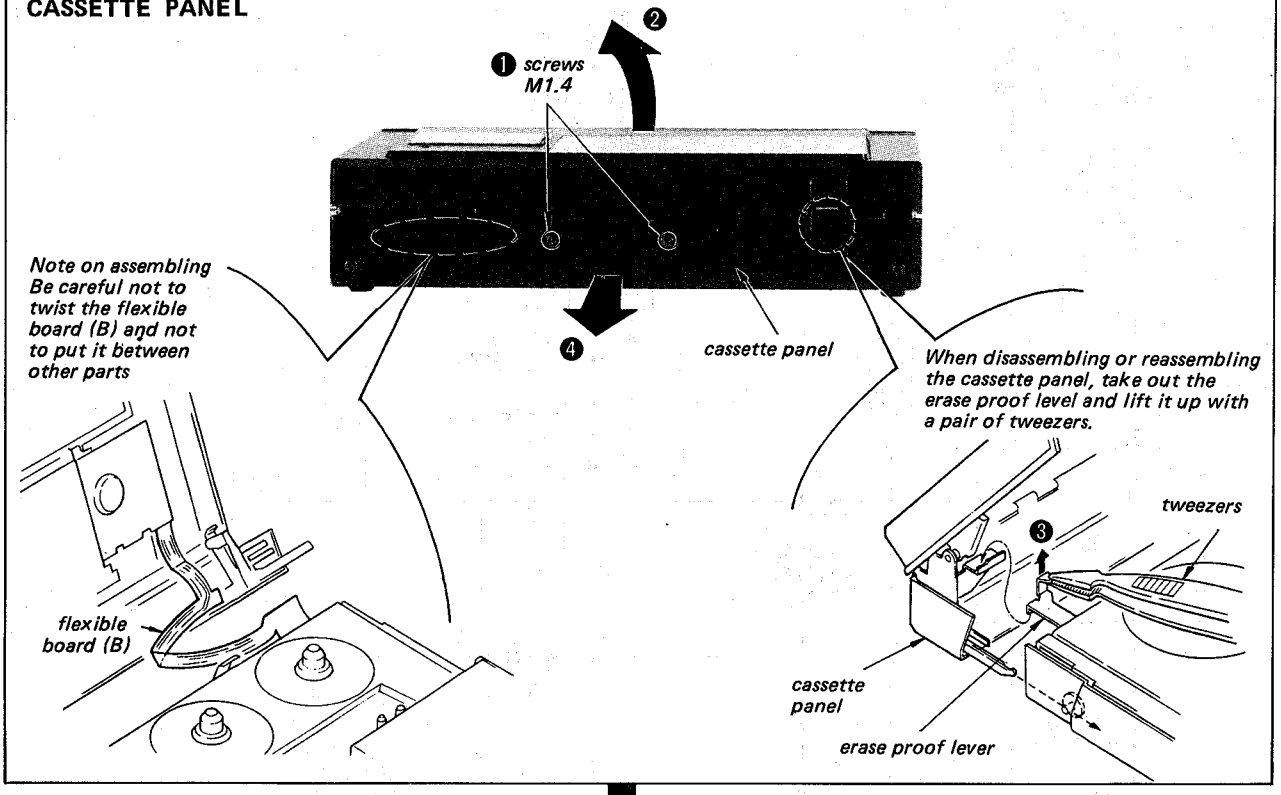
## 1-1. BLOCK DIAGRAM



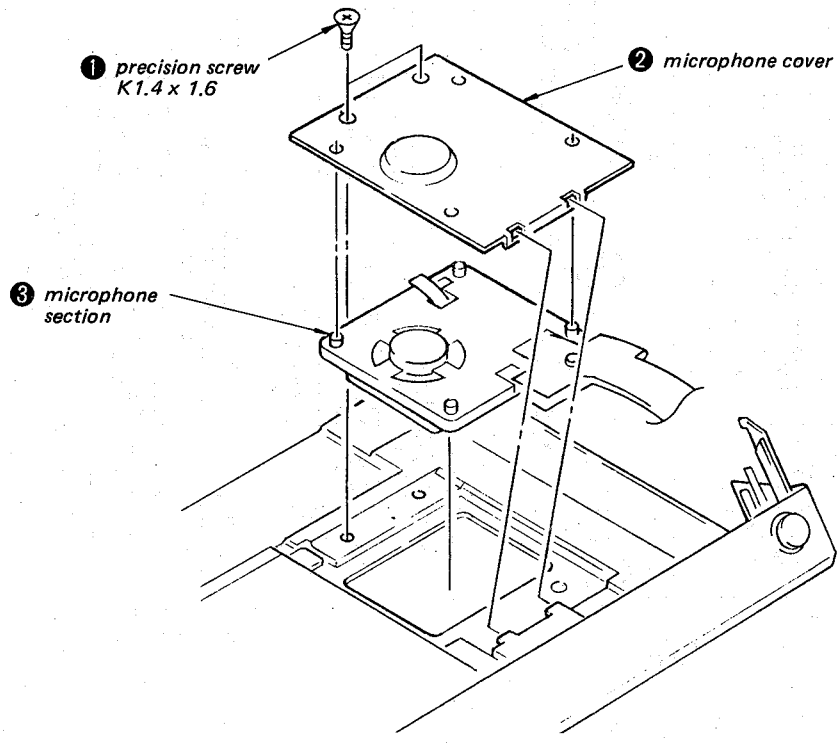
# SECTION 2
# DISASSEMBLY

**Note:** Follow the disassembly procedure in the numerical order given.

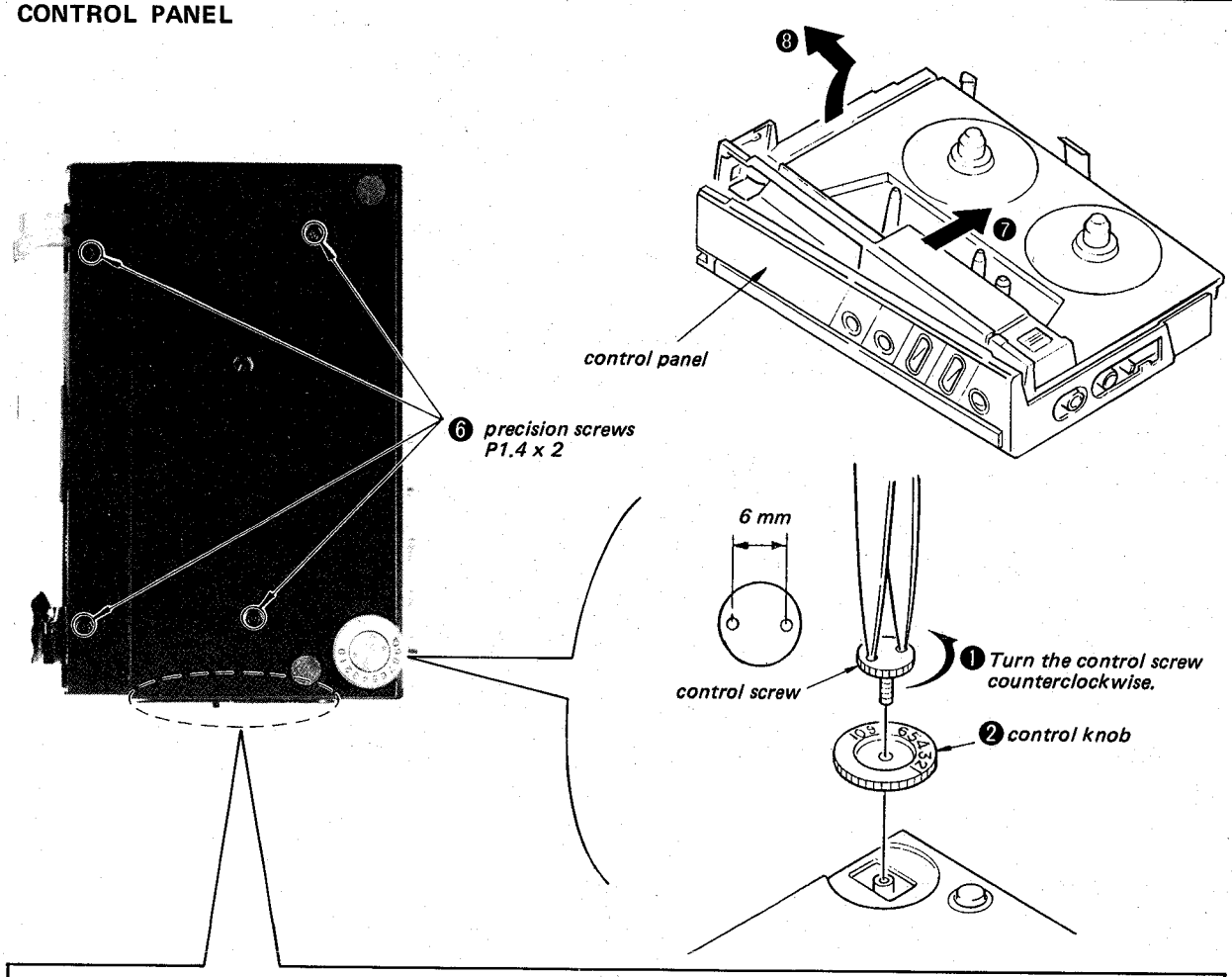
## CASSETTE PANEL

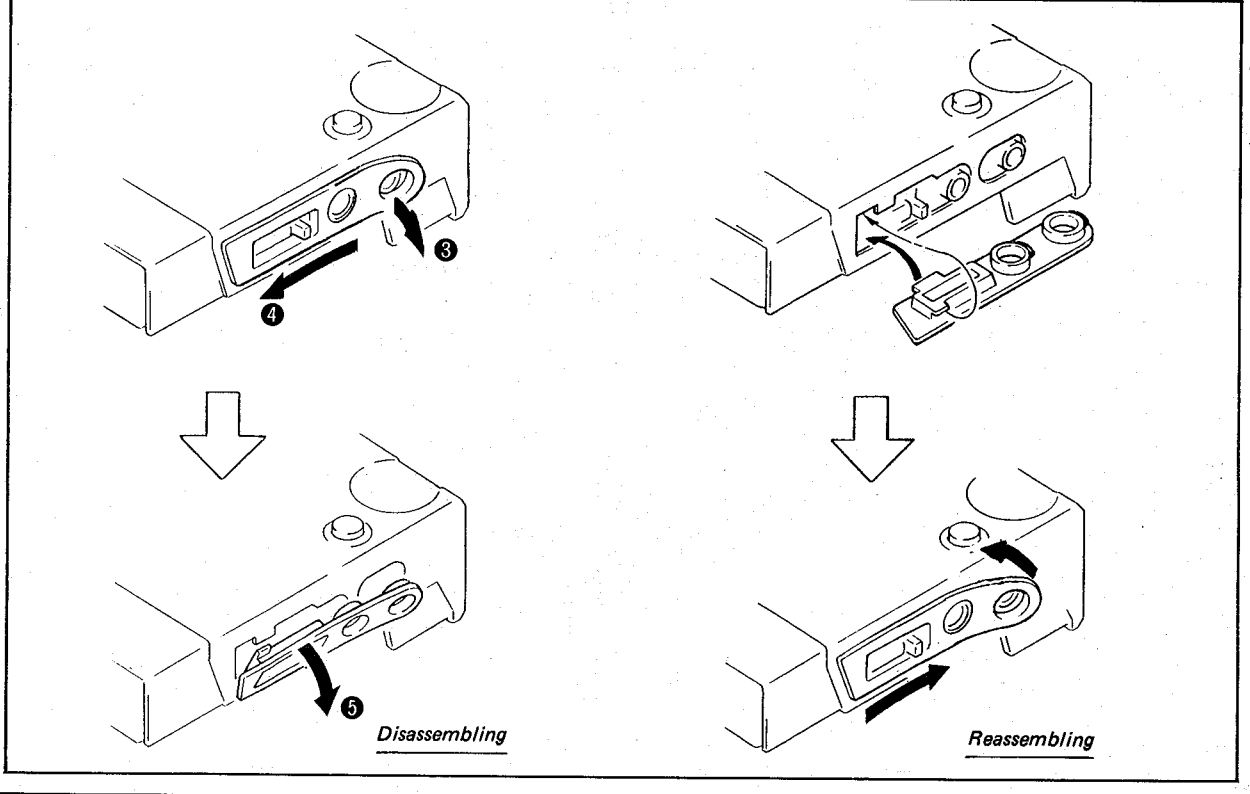

❷
❶ screws M1.4
❹
cassette panel
Note on assembling
Be careful not to twist the flexible board (B) and not to put it between other parts
flexible board (B)
When disassembling or reassembling the cassette panel, take out the erase proof level and lift it up with a pair of tweezers.
tweezers
❸
cassette panel
erase proof lever

## MICROPHONE SECTION

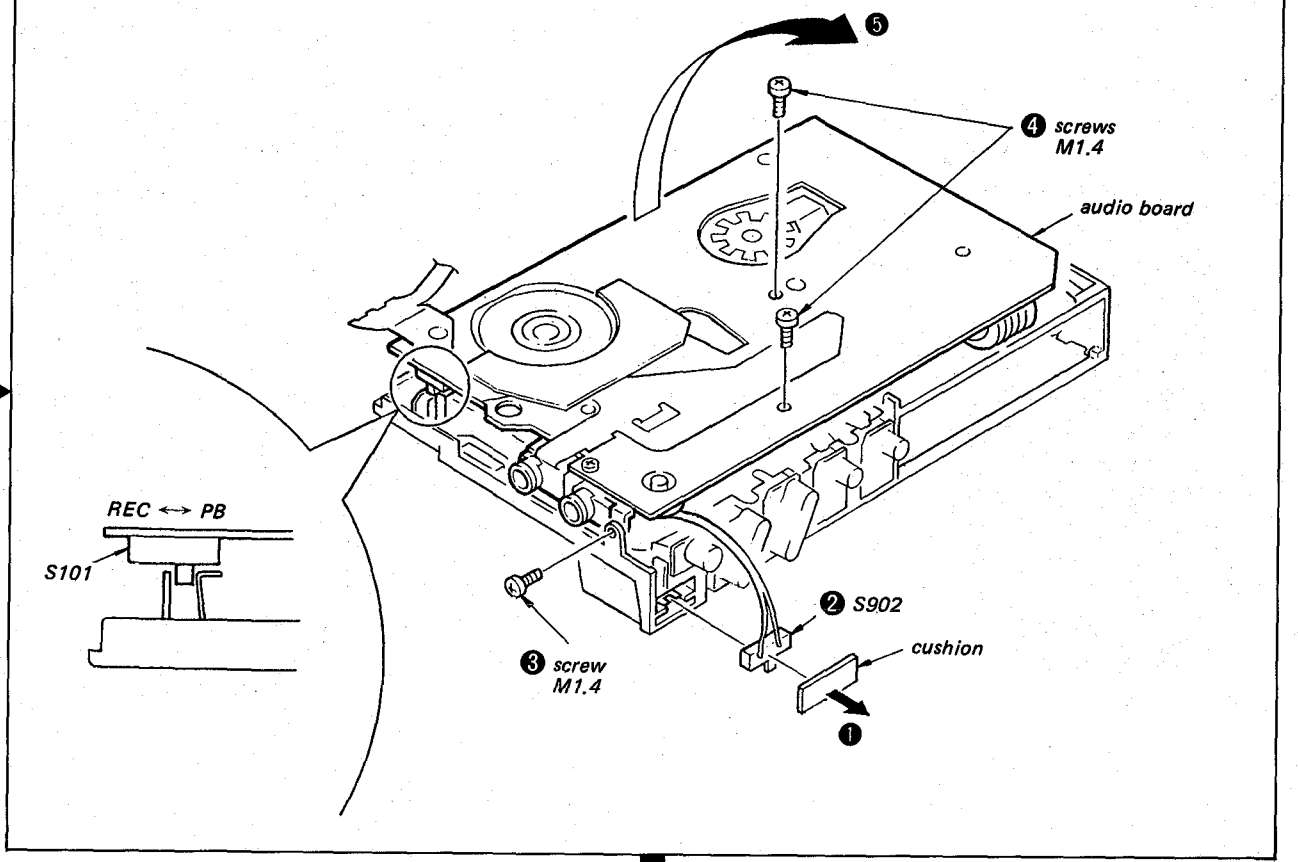


## CONTROL PANEL

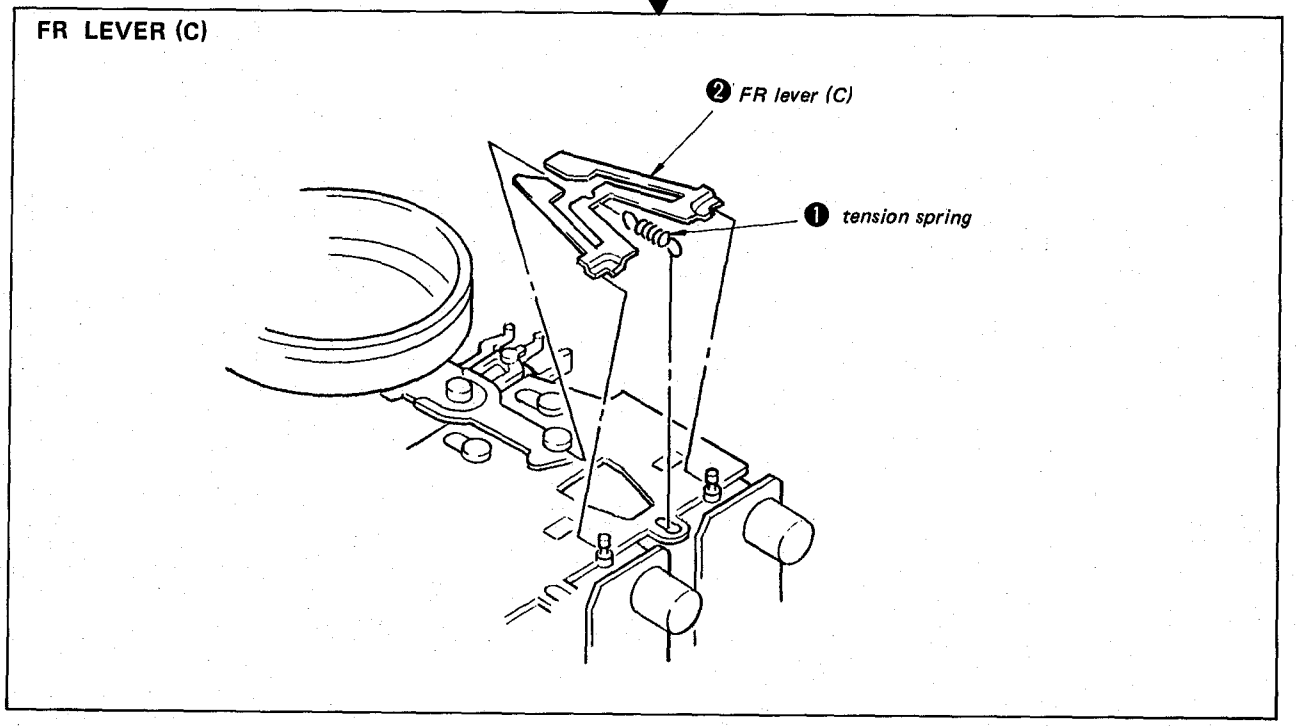


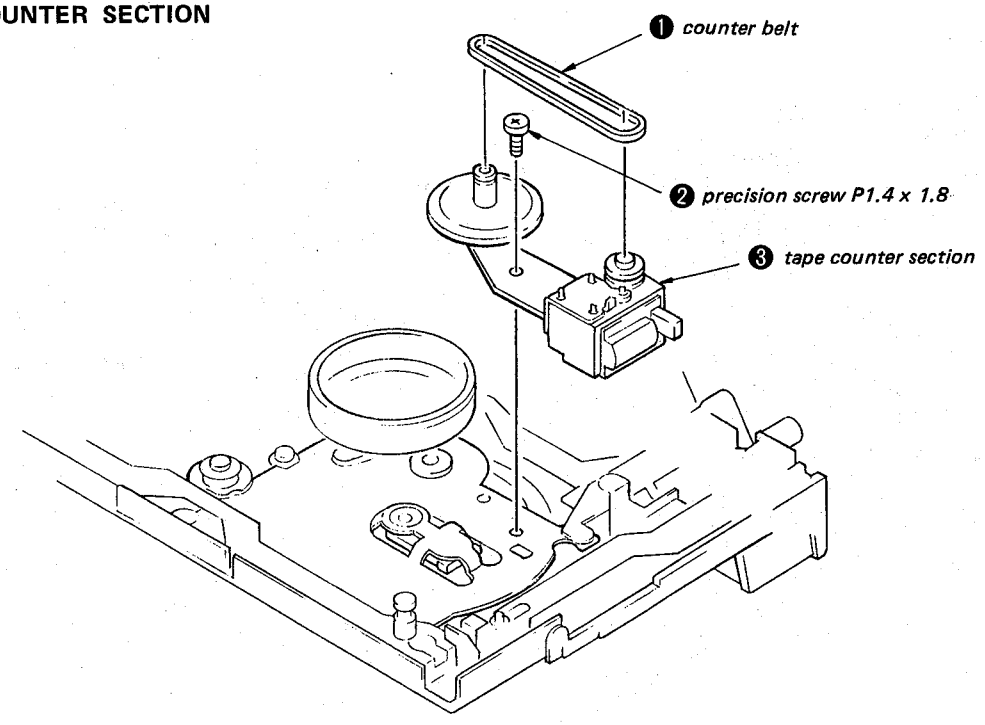
## AUDIO BOARD



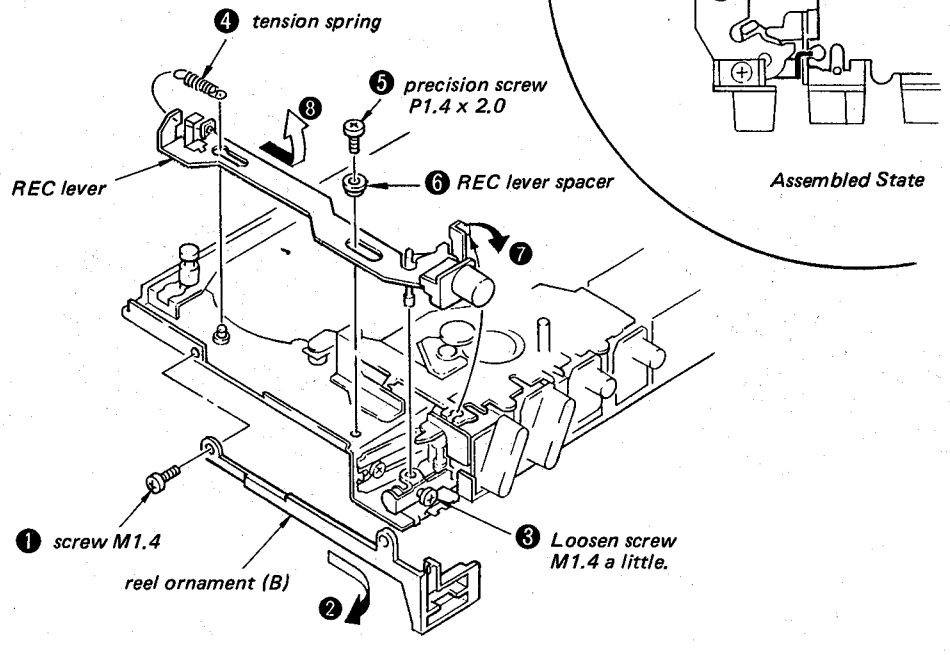

## FR LEVER (C)



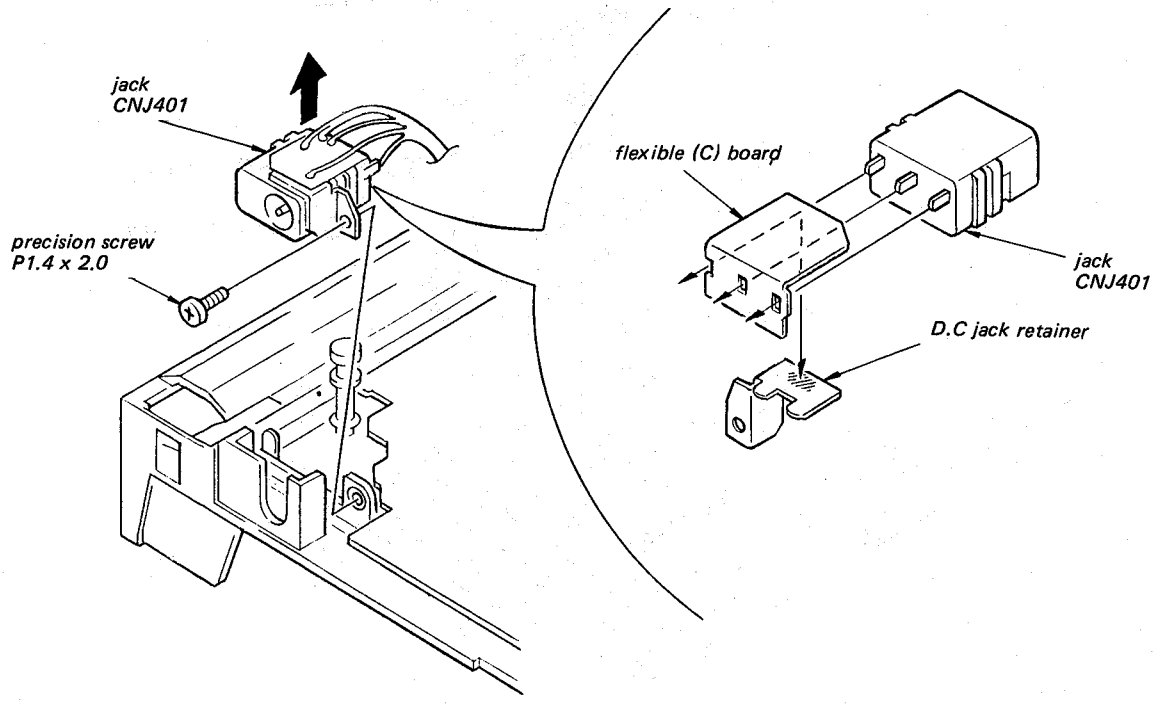
## TAPE COUNTER SECTION




## REC LEVER

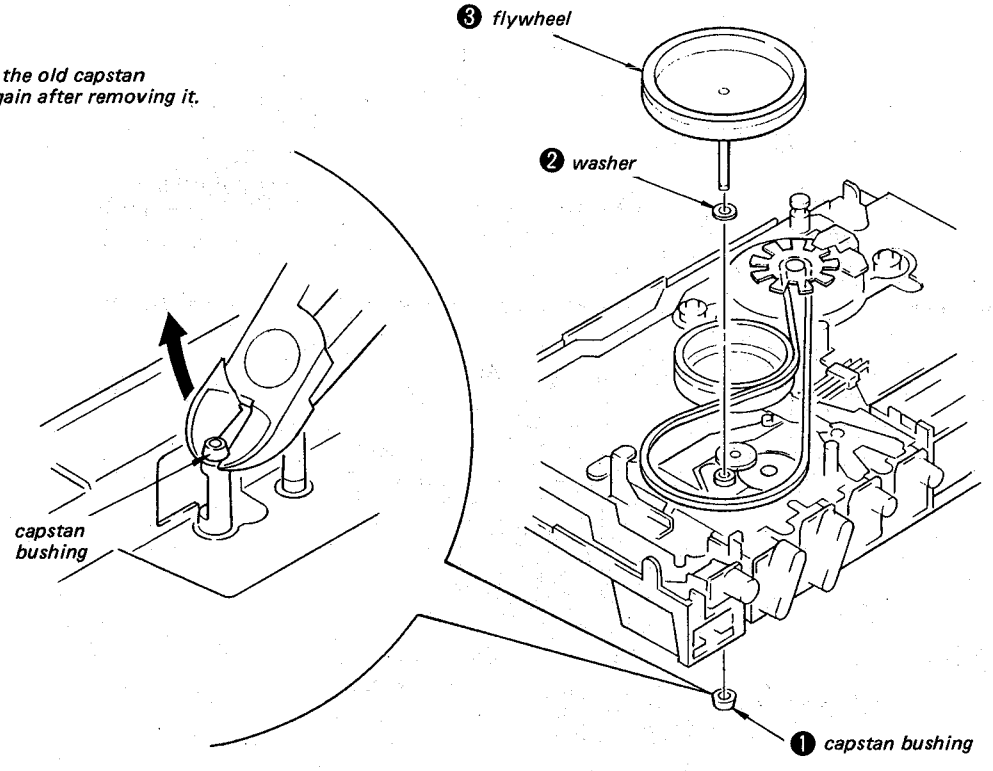


## JACK

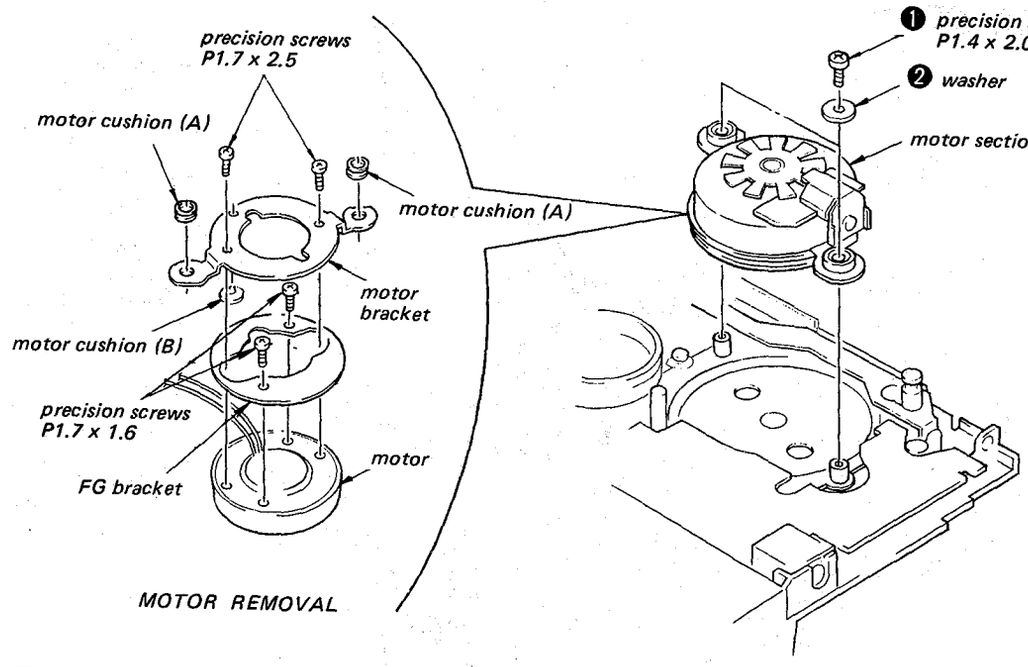



## FLYWHEEL

*Don't use the old capstan bushing again after removing it.*

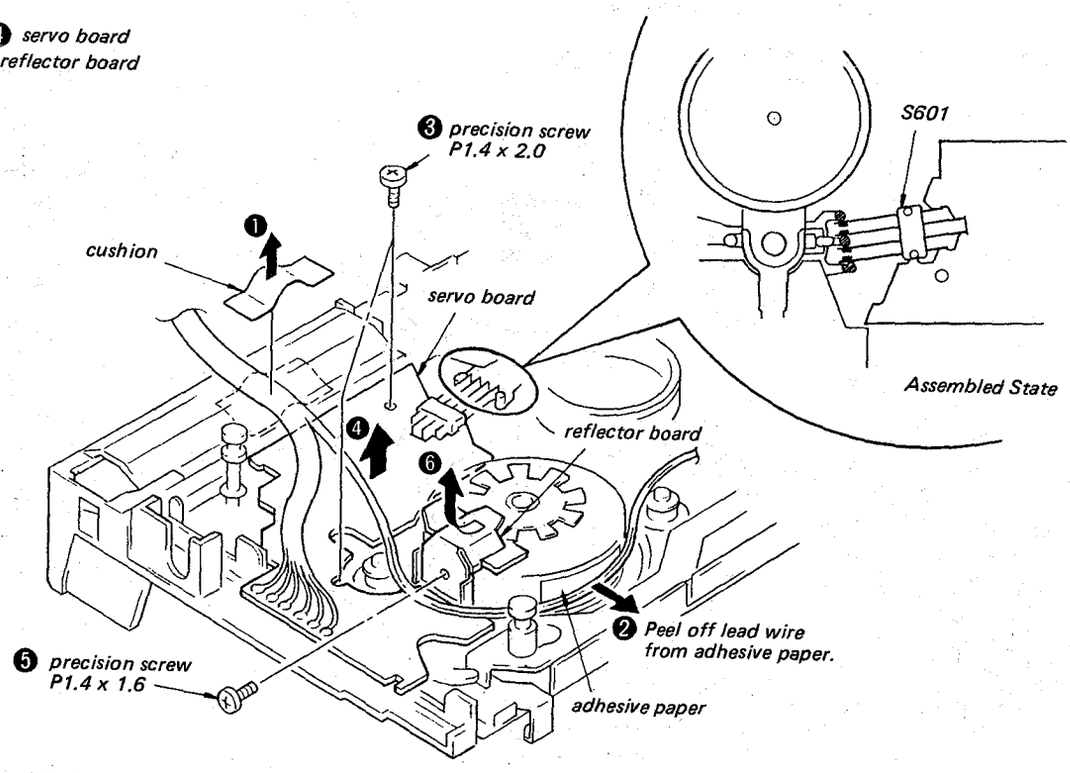


## MOTOR SECTION



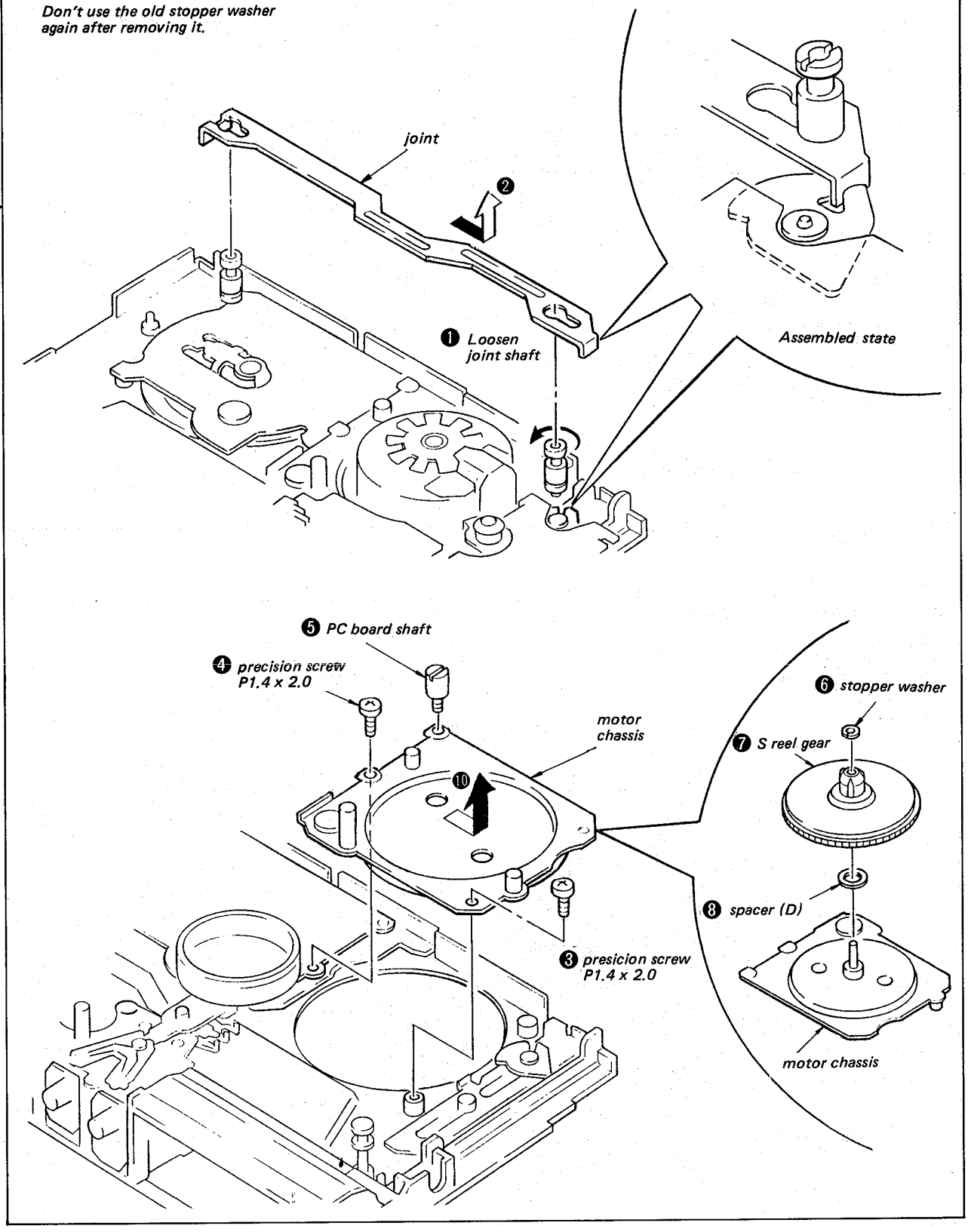

## SERVO BOARD/REFLECTOR BOARD

❶ – ❹ servo board
❺ , ❻ reflector board

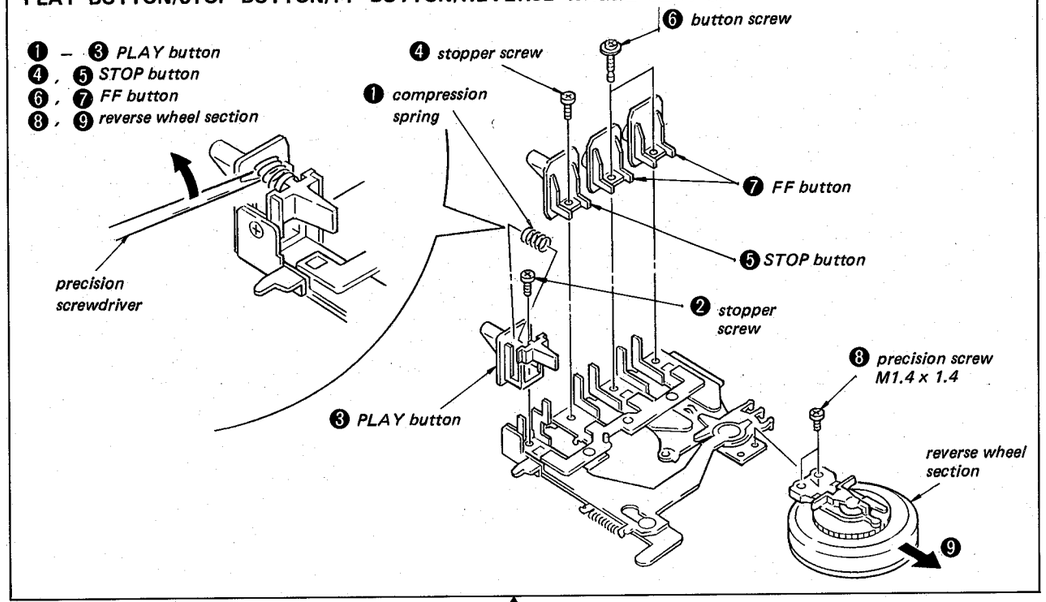


## S REEL GEAR

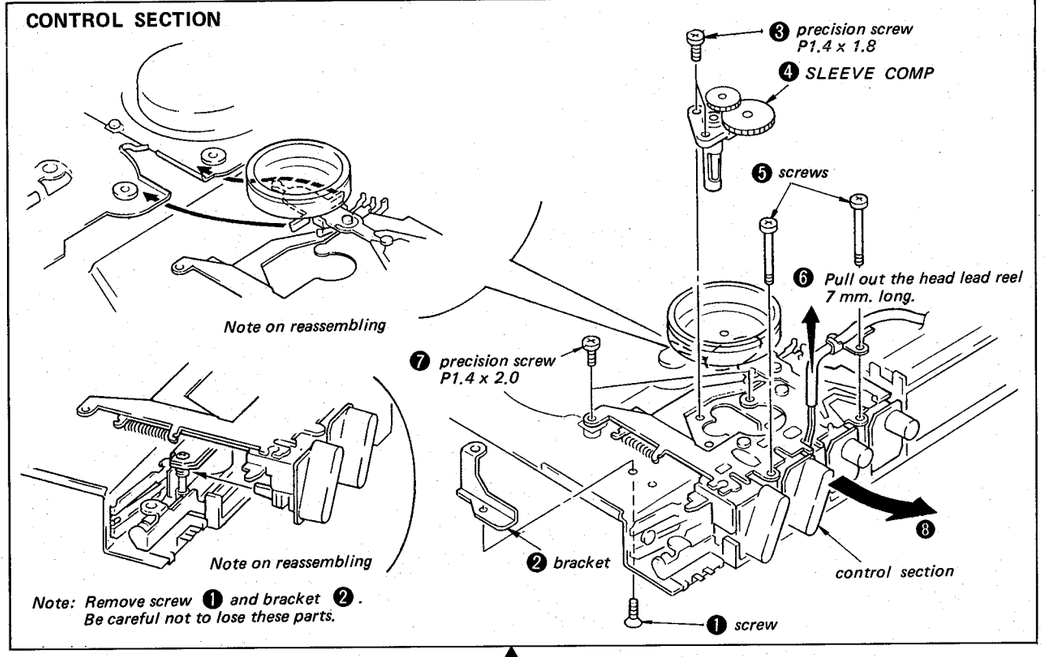
*Don't use the old stopper washer again after removing it.*



## PLAY BUTTON/STOP BUTTON/FF BUTTON/REVERSE WHEEL SECTION




## CONTROL SECTION

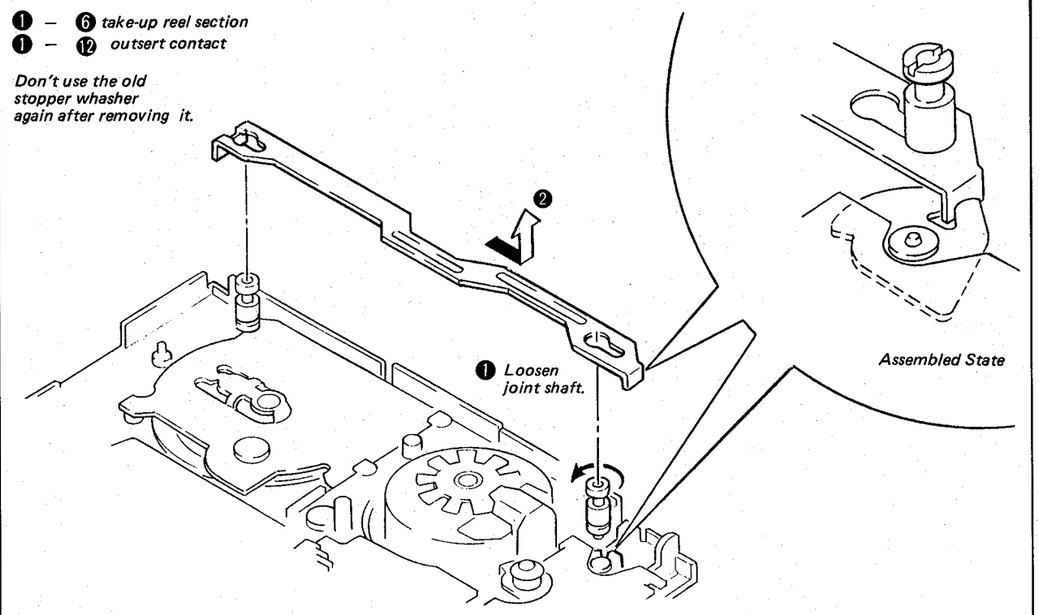

❸ precision screw P1.4 x 1.8
❹ SLEEVE COMP
❺ screws
❻ Pull out the head lead reel 7 mm. long.
❼ precision screw P1.4 x 2.0
Note on reassembling
Note on reassembling
❷ bracket
control section
❶ screw
❽
Note: Remove screw ❶ and bracket ❷. Be careful not to lose these parts.

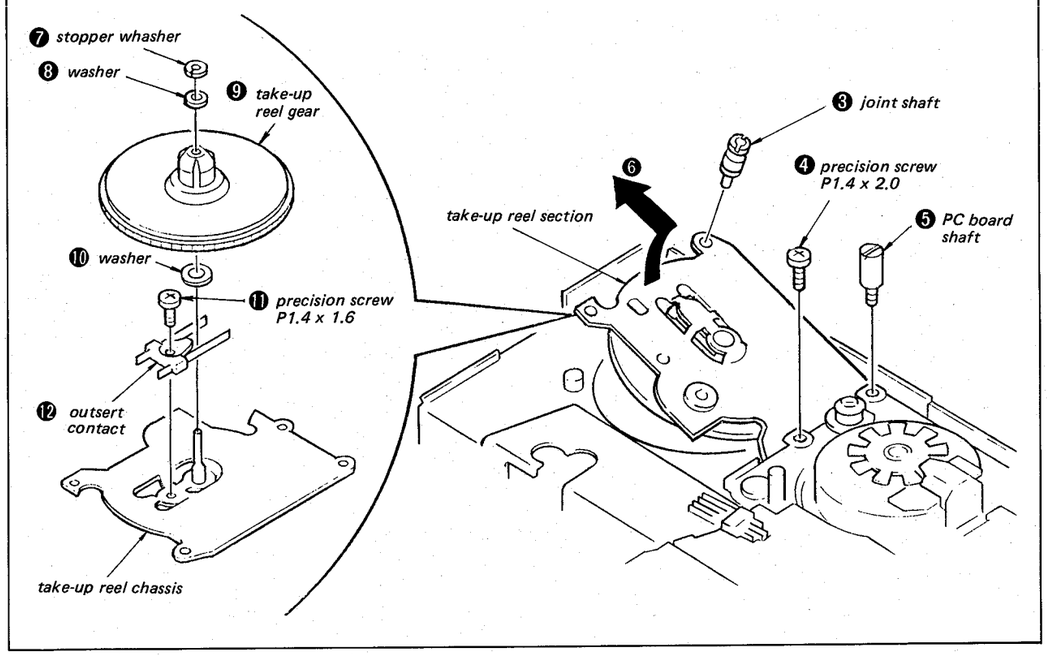


## TAKE-UP REEL SECTION/OUTSERT CONTACT

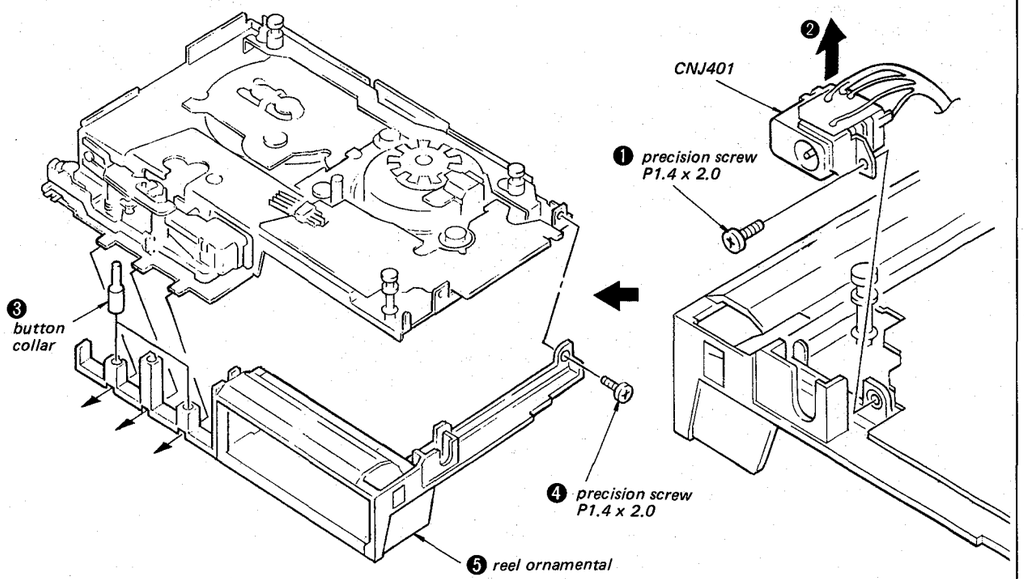
❶ – ❻ take-up reel section
❶ – ⓬ outsert contact

Don't use the old stopper whasher again after removing it.

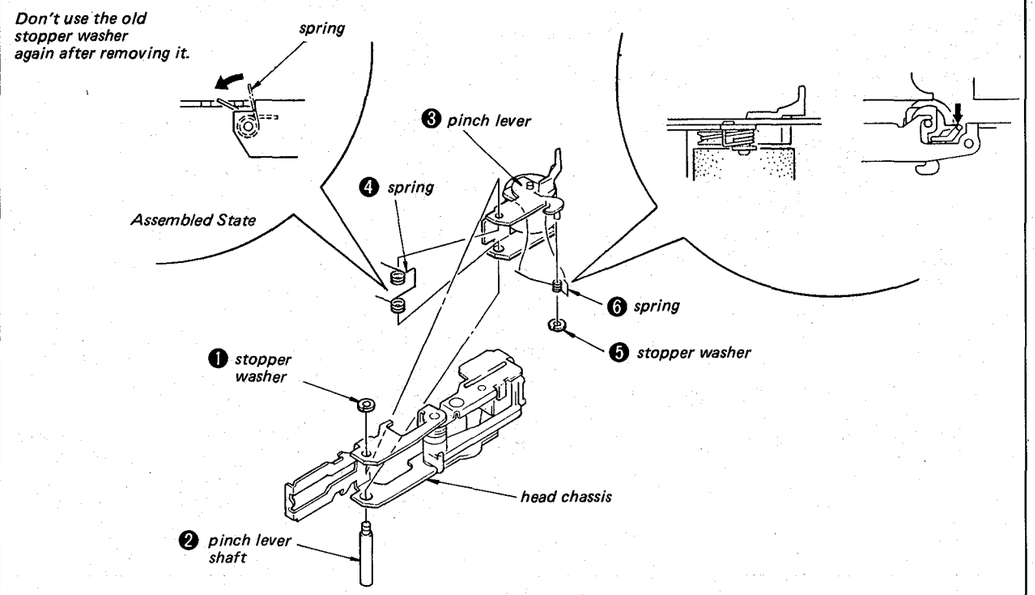


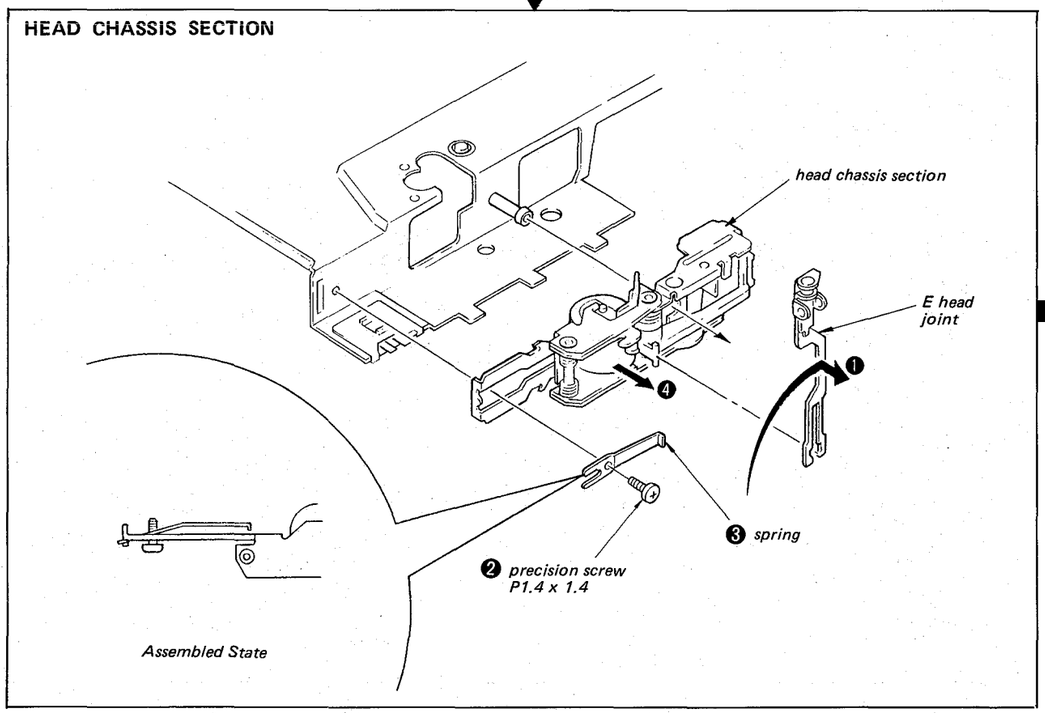
## REEL ORNAMENT



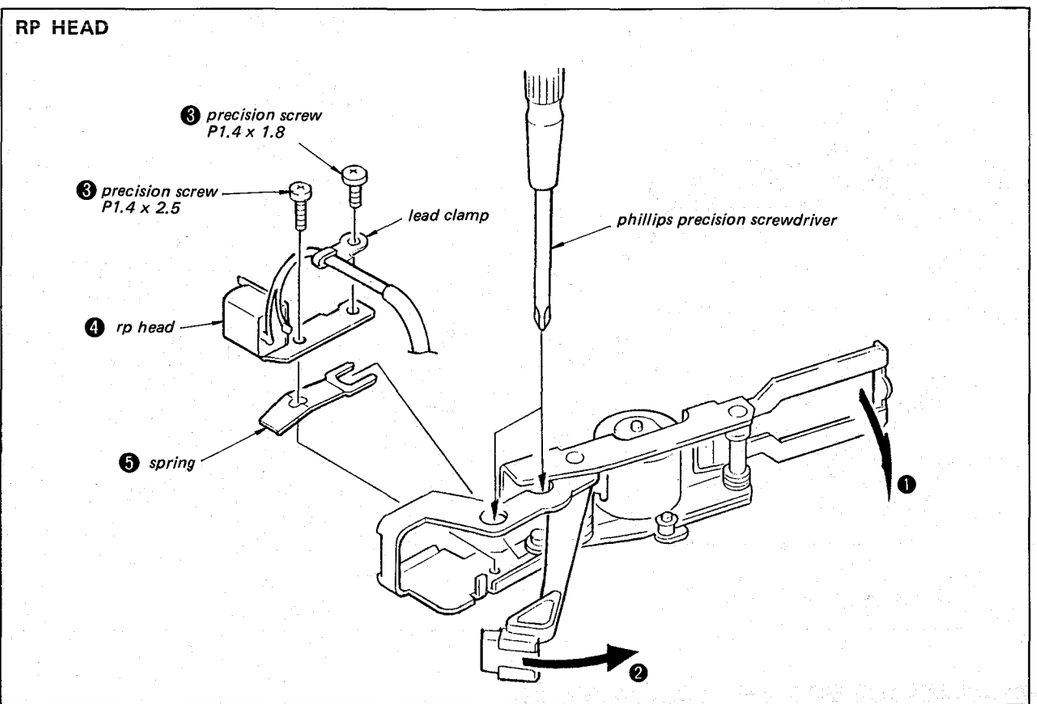

## HEAD CHASSIS/PINCH LEVER




## HEAD CHASSIS SECTION




## RP HEAD



# SECTION 3
# ADJUSTMENTS

## 3-1. MECHANICAL ADJUSTMENT

### PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback head  pinch roller
   capstan  rubber belts
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

**Torque Measurement**

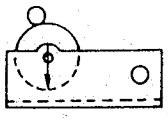
| Mode | Torque Meter | Meter Reading |
|---|---|---|
| FWD | CQ-102C | 20–40 g · cm (0.28 – 0.56 oz·inch) |
| FF, REW | CQ-201B | more than 60 g · cm (0.83 oz·inch) |
| Back Tension | CQ-102C | less than 0–2.5 g · cm (0 – 0.03 oz·inch) |
| Tape pulling force | CQ-403A | more than 45 g (0.62 oz·inch) |

**Pinch Roller Pressure Adjustment**

- **FWD Mode**

1. Pull the spring scale in the direction of the arrow.
2. Slowly return the pinch roller and read the spring scale just when the pinch roller starts rotating.

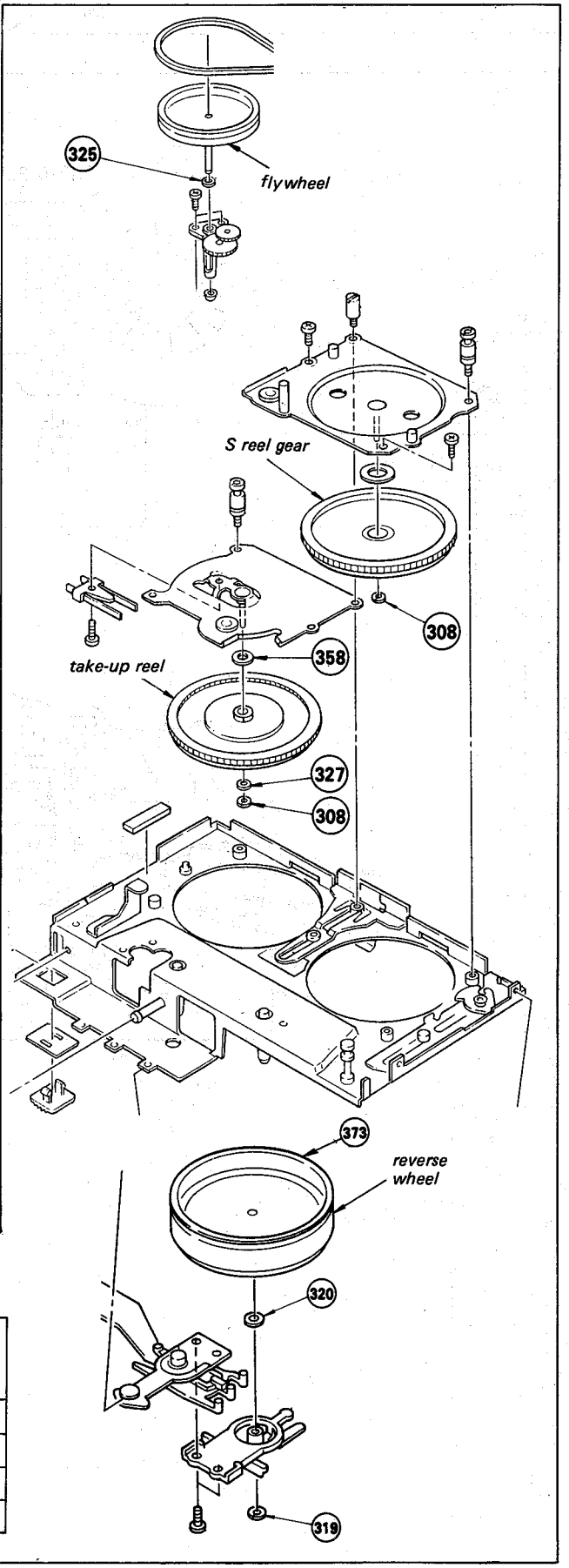
*Specification* *150 ± 20 g*



**Thrust Clearance Adjustment**

Each section should be rotate smoothly.

| | Thrust Clearance | Adjustment parts Refer to parts list on page 31 for part no. and thickness. |
|---|---|---|
| flywheel | 0.2 mm | No. 325 |
| take-up reel | 0.05 – 0.15 mm | No. 308/327/358 |
| S reel gear | 0.05 – 0.15 mm | No. 308 |
| reverse wheel | 0.05 – 0.15 mm | No. 319/320 |



## 3-2. ELECTRICAL ADJUSTMENT
### CASSETTE SECTION

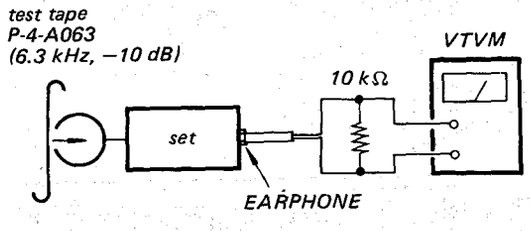
### Record/playback Head Azimuth Adjustment

**Setting:**

VOL control: mechanical mid

**Procedure:**

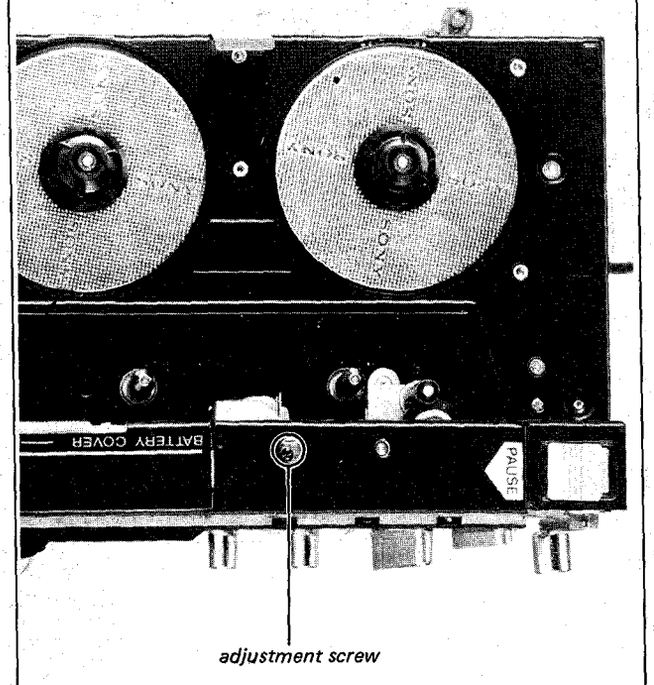
1. Mode: playback




2. Turn the adjustment screw for maximum VTVM reading.

**Note:** Several peaks may appear, but take the maximum.

**Adjustment Location:**



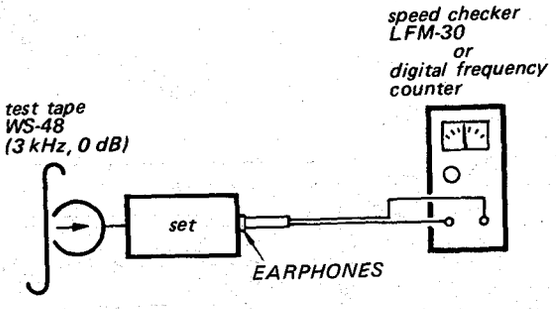

### Tape Speed Adjustment

**Setting:**

VOL control: mechanical mid

**Procedure:**

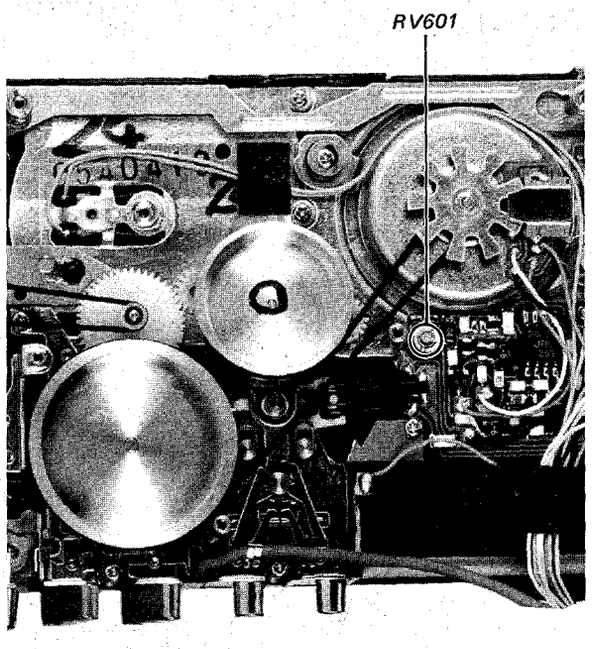
Mode: FWD




**Specification:**

| Speed checker | Digital frequency counter |
|---|---|
| 3,000 Hz ± 2% | 2,940 – 3,060 Hz |

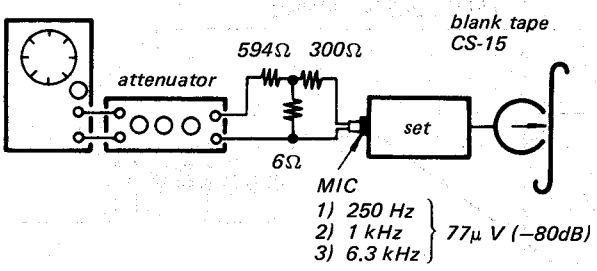
**Adjustment Location:**



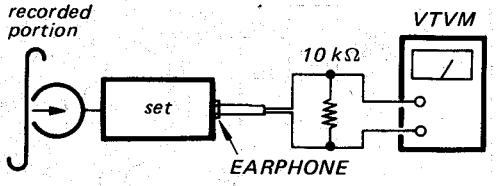
## Record Bias Adjustment

**Procedure**

1. Mode: record

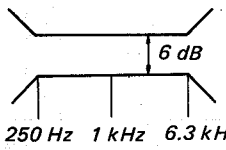



2. Mode: playback

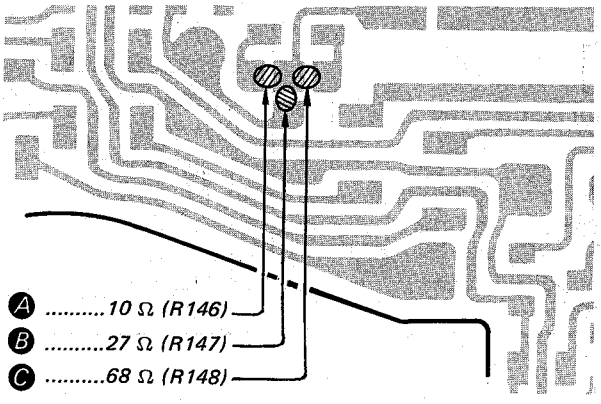



1) Adjust the VOLUME control so that 1 kHz output is 77.5 mV (−20 dB).
2) Confirm that 250 Hz and 6.3 kHz output is ± 3 dB relative to 1 kHz output.
3) If necessary, change the pattern connections and repeat the steps given above.

**Specification:**

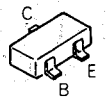



| Pattern connection | VTVM reading (6.3 kHz) |
|---|---|
| C | high |
| B | |
| B C | |
| A | |
| A C | |
| A B | |
| A B C | low |

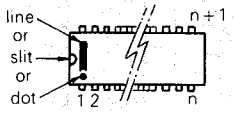



## ● Semiconductor Lead Layouts

**2SA812-M6**
**2SB624-BV5**
**2SB798-DL**
**2SC2712G**
**2SC1623-T2L6**
**2SD596-DV4**
**2SD1048X6**
**DTA114TK**
**DTC143TK**

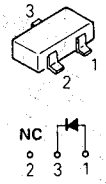



**BA3410AF**
**CX20172**
**NJM2903M**

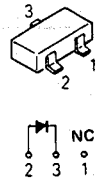



(Top view)

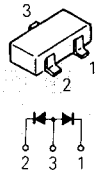
**DA106K**



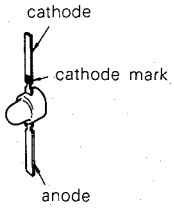

**RD3.9M-B2**



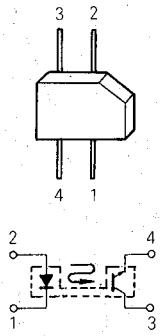

**1S2835**

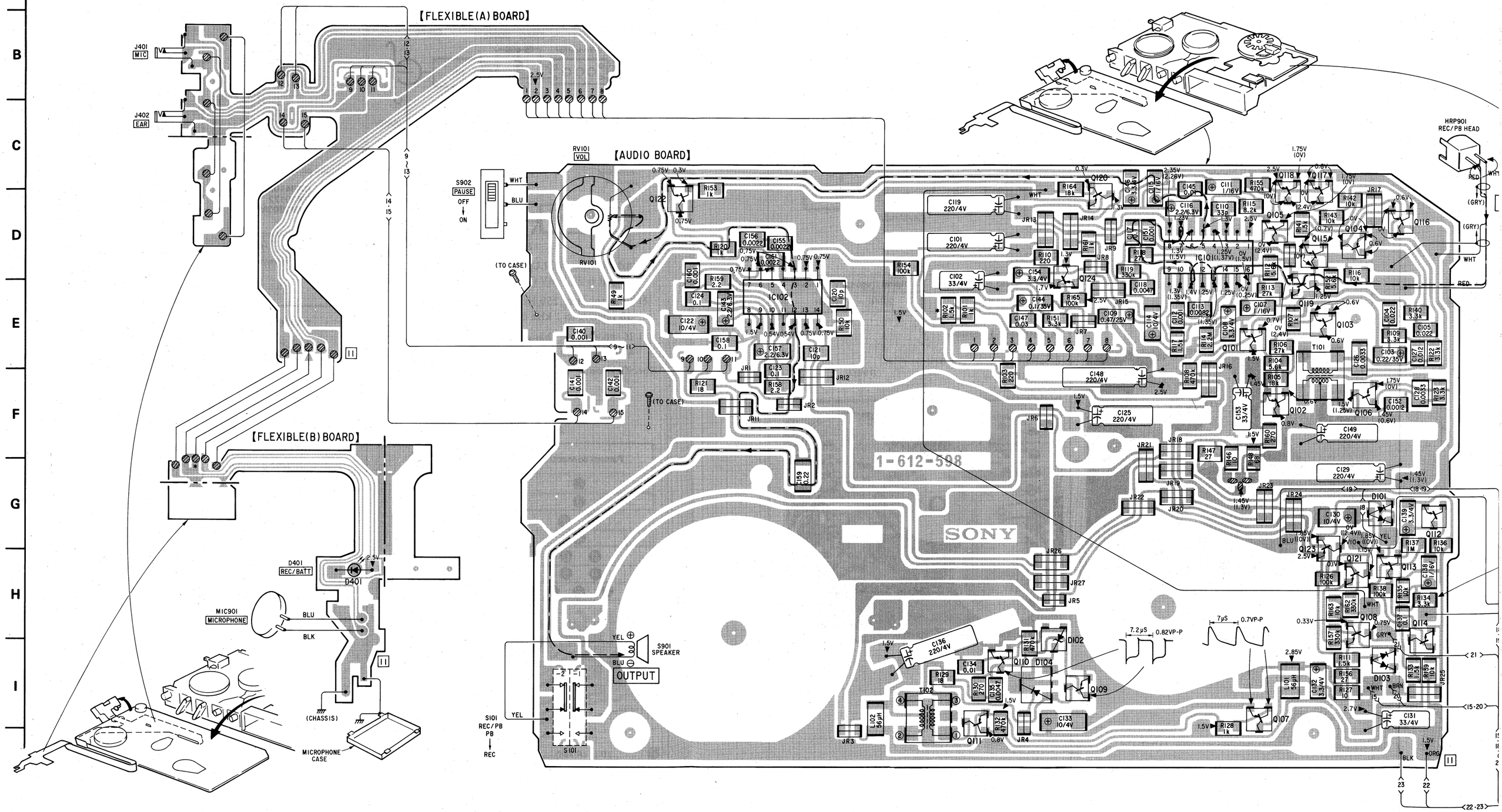



**GL-1PR1**




**GP2S04-B**




【FLEXIBLE(A)BOARD】
【AUDIO BOARD】
【FLEXIBLE(B)BOARD】
J401 MIC
J402 EAR
RV101 VOL
S902 PAUSE OFF ON
S901 SPEAKER
S101 REC/PB PB REC
D401 REC/BATT
MIC901 MICROPHONE
HRP901 REC/PB HEAD
(TO CASE)
(CHASSIS)
MICROPHONE CASE
OUTPUT
IC101
IC102
1-612-598
SONY

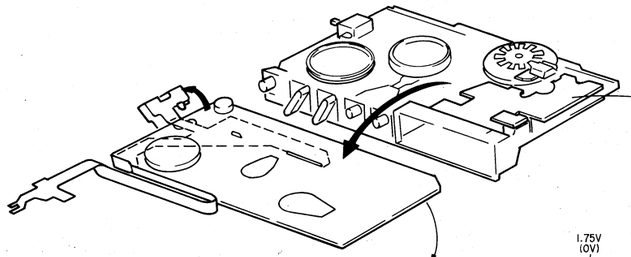
Lead Layouts. ●See page 25 for notes.

8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

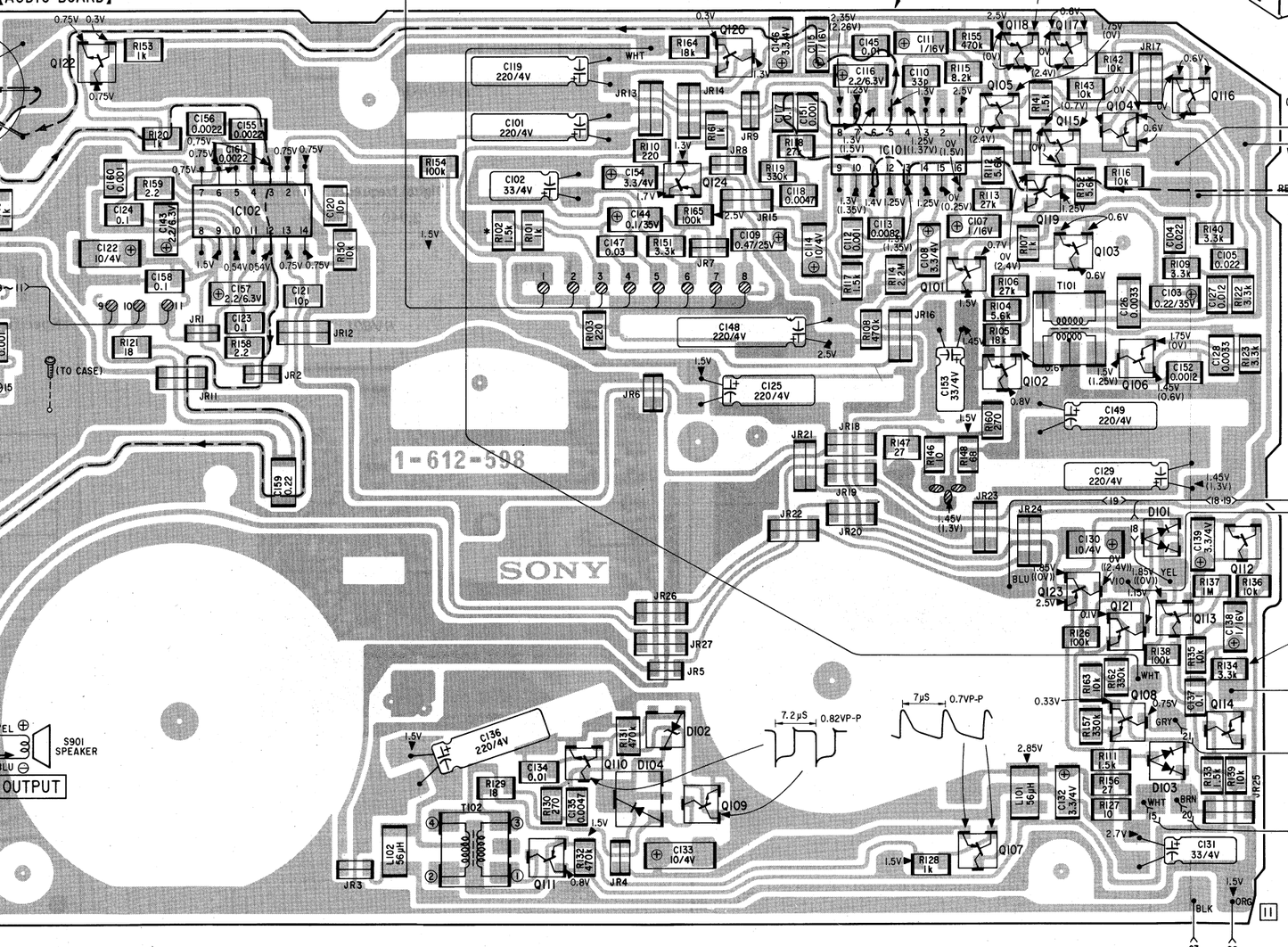
IC Q: 122 IC102 111 110 124 109 120 IC101 101 107 105 102 118 119 115 117 103 123 104 121 108 106 113 116 114 112 606 607 608 IC601 604 602 605 603 601

D: 104 102 101 103 601

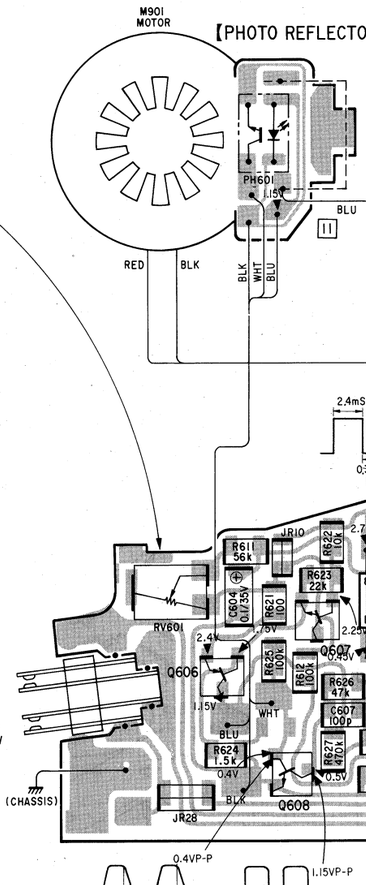
A B C D E F G H I J



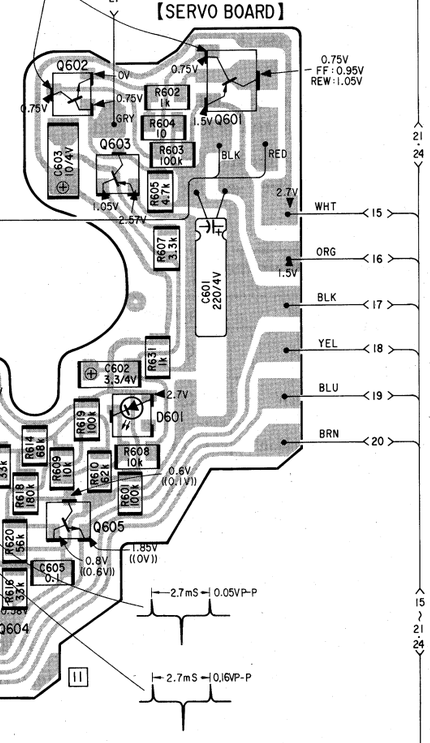
【AUDIO BOARD】



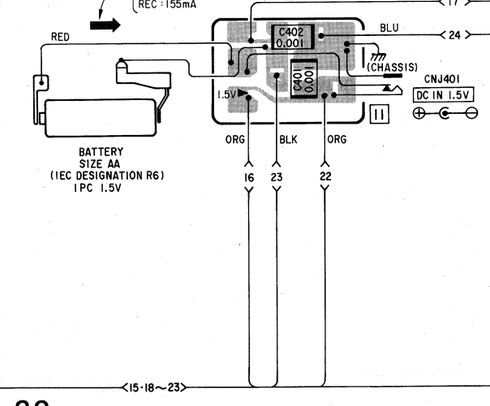

【PHOTO REFLECTOR BOARD】



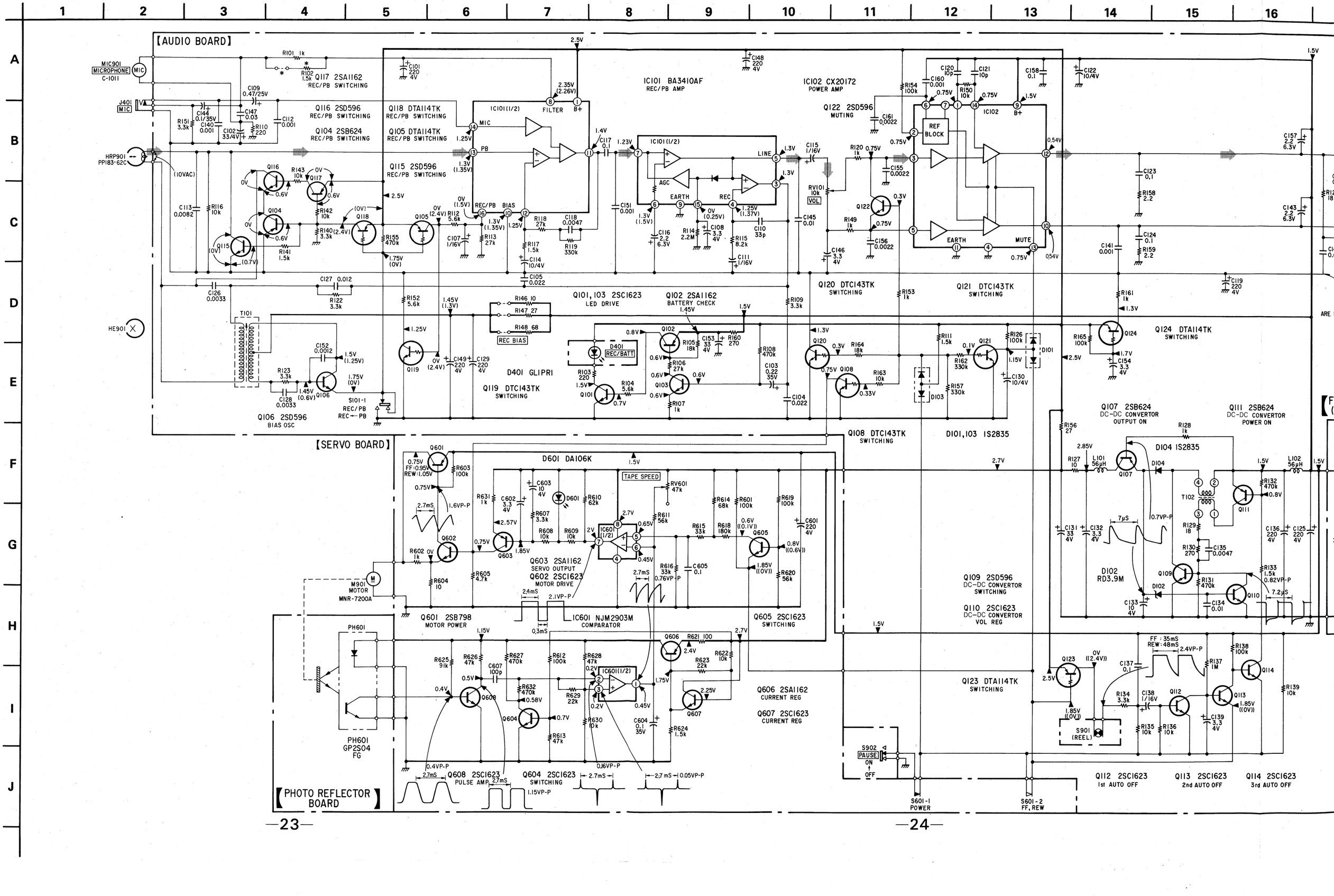

【SERVO BOARD】



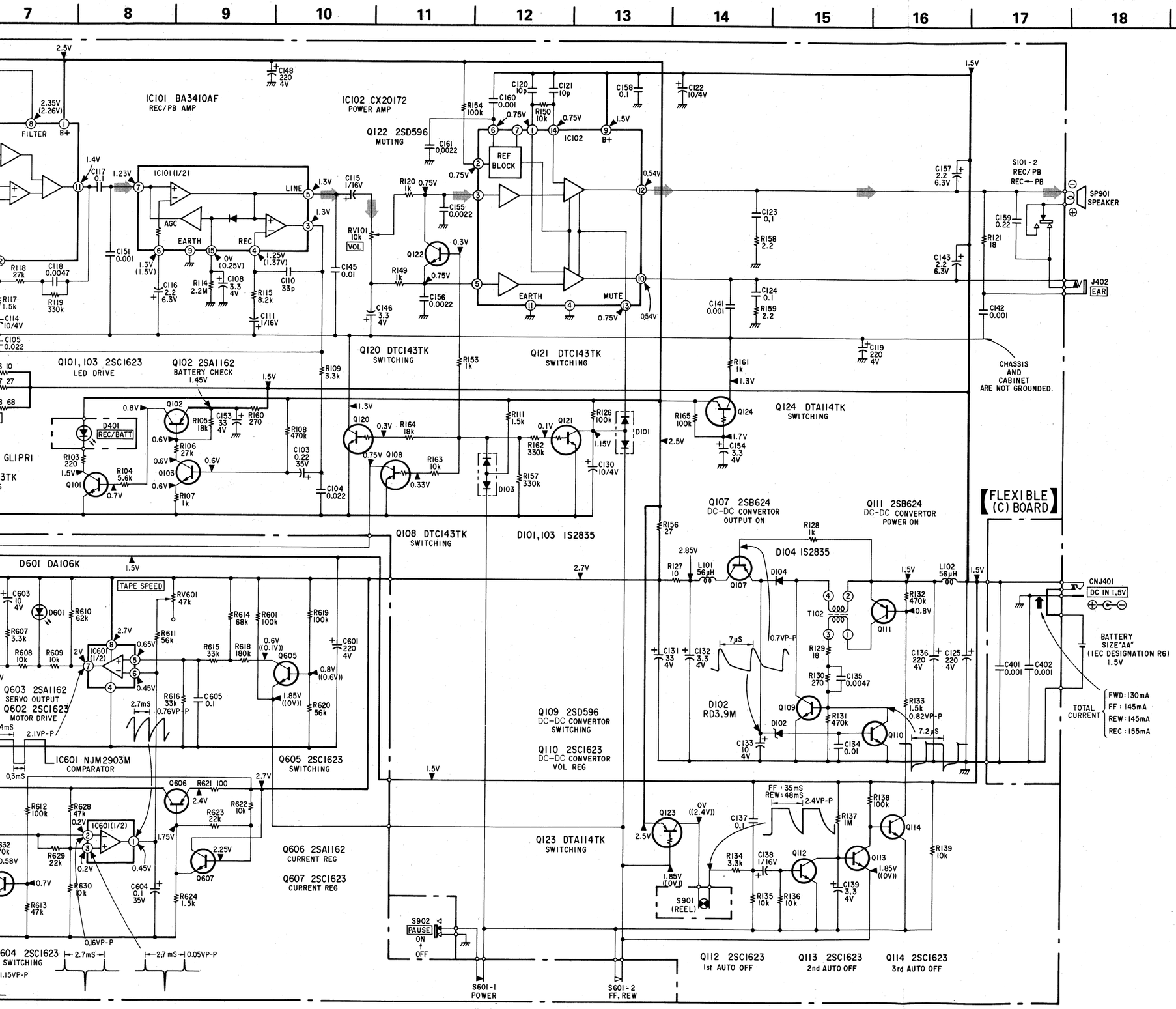

【FLEXIBLE(C)BOARD】



## 4-2. SCHEMATIC DIAGRAM

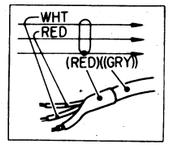


TCM-10




**Note on Mounting Diagram.**

- Color code of sleeving over the end of the jacket.




- ●—: parts extracted from the conductor side.
- —▶—: signal path
- —▶—: L-CH signal path
- —▶—: R-CH signal path
- ▨: B + pattern

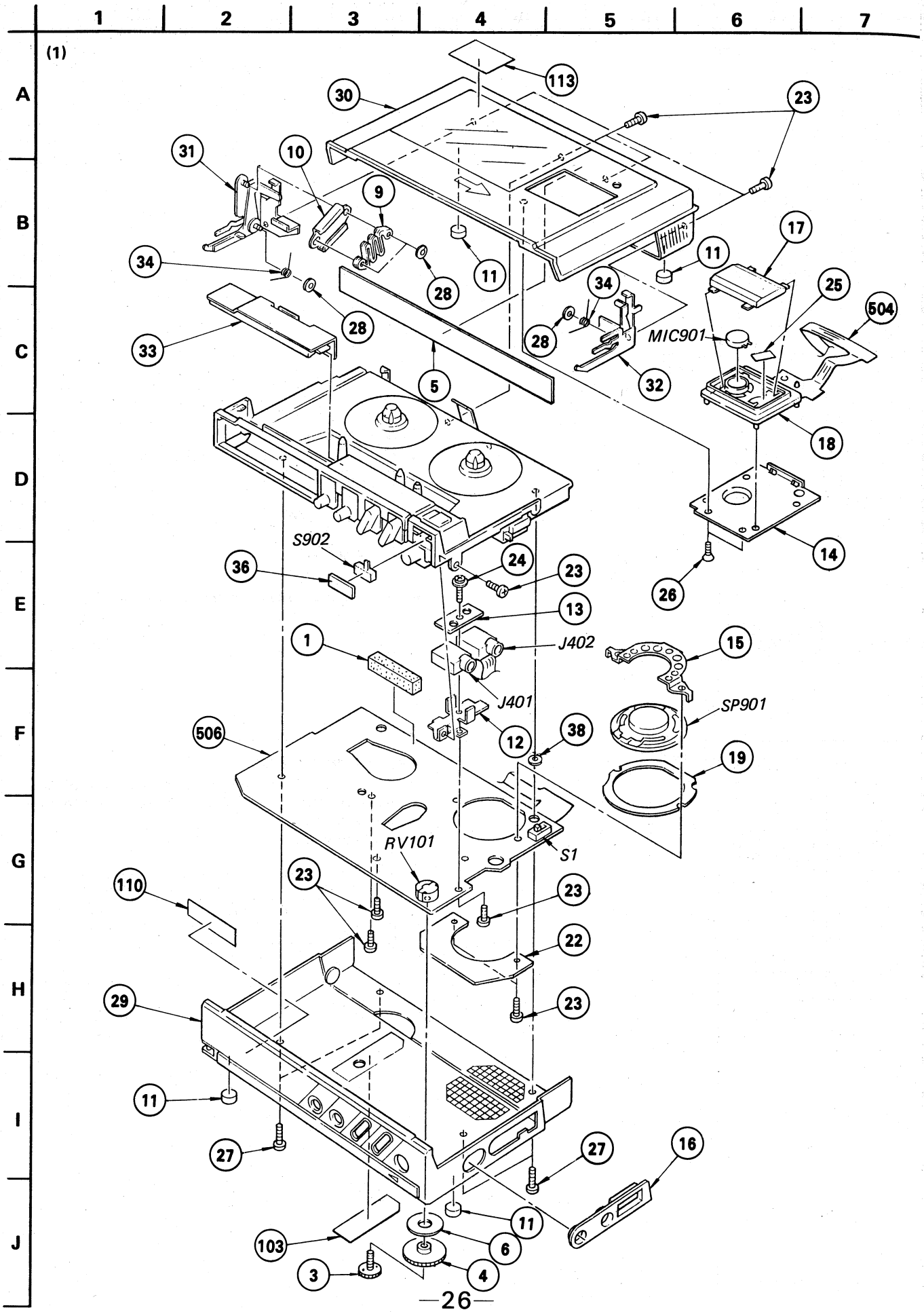
**Note on Schematic Diagram.**

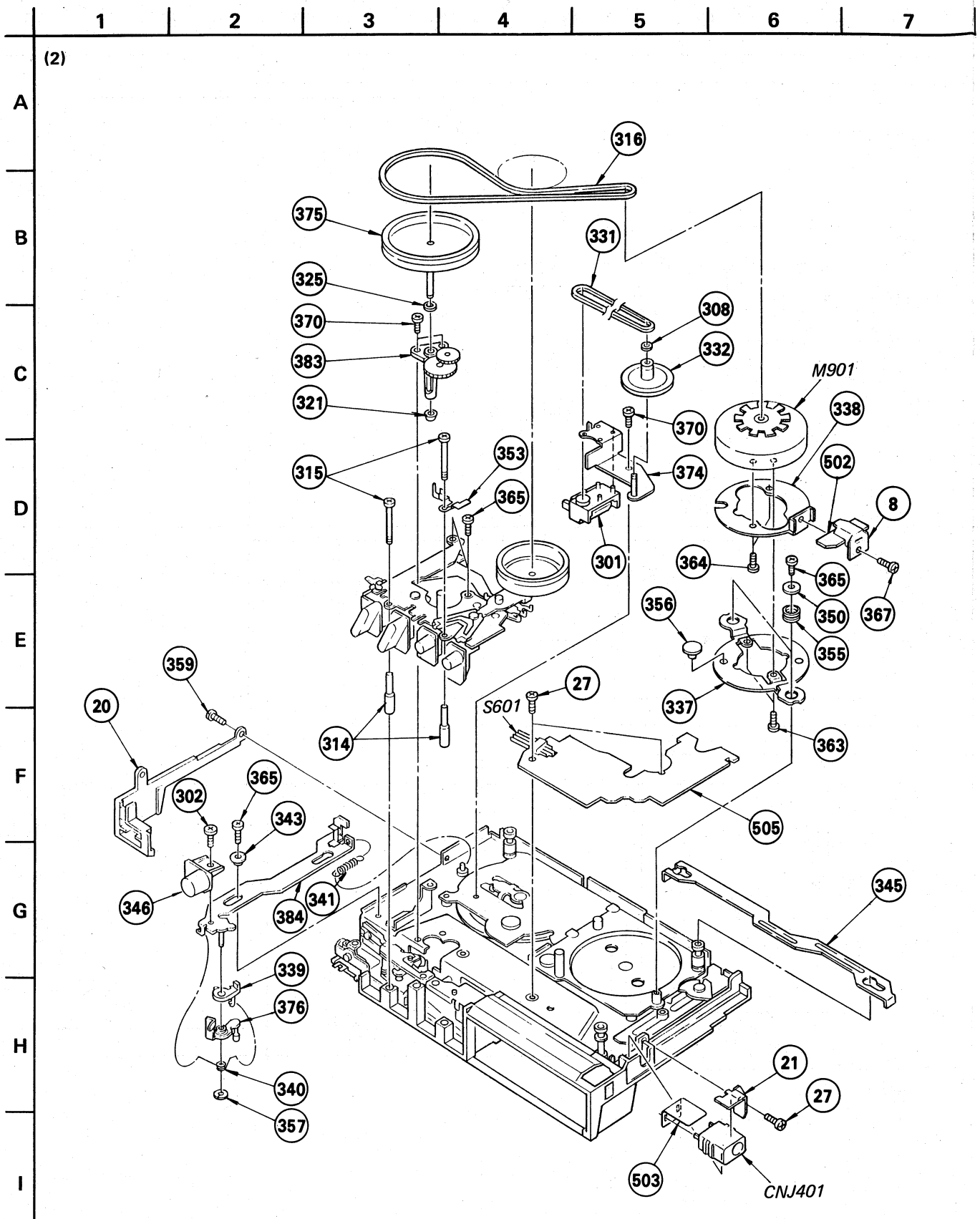
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- ▨: signal path.
- Switch

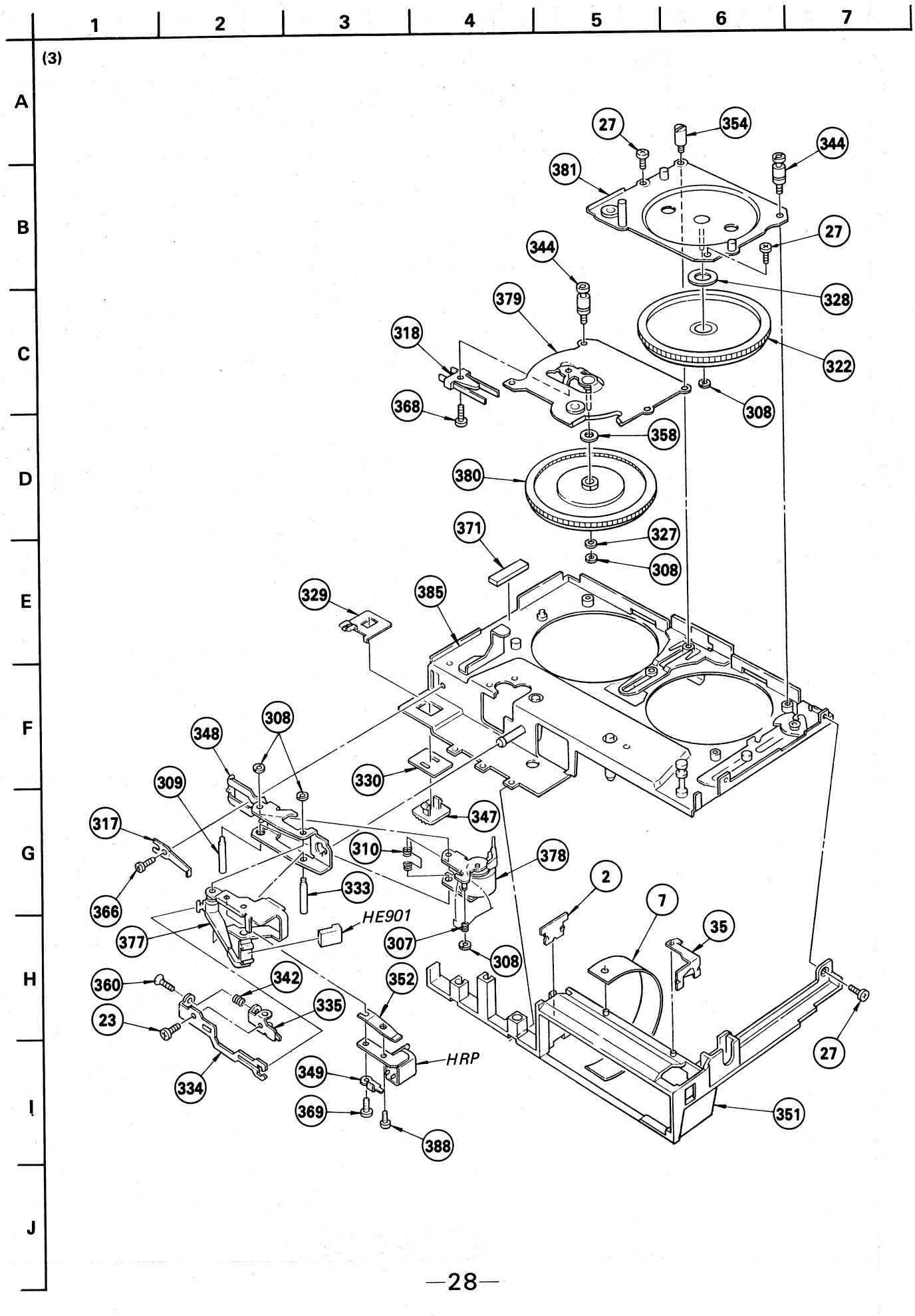
| Ref. No. | Switch | Position |
|---|---|---|
| S101 | REC/PB | PB |
| S902 | PAUSE | OFF |

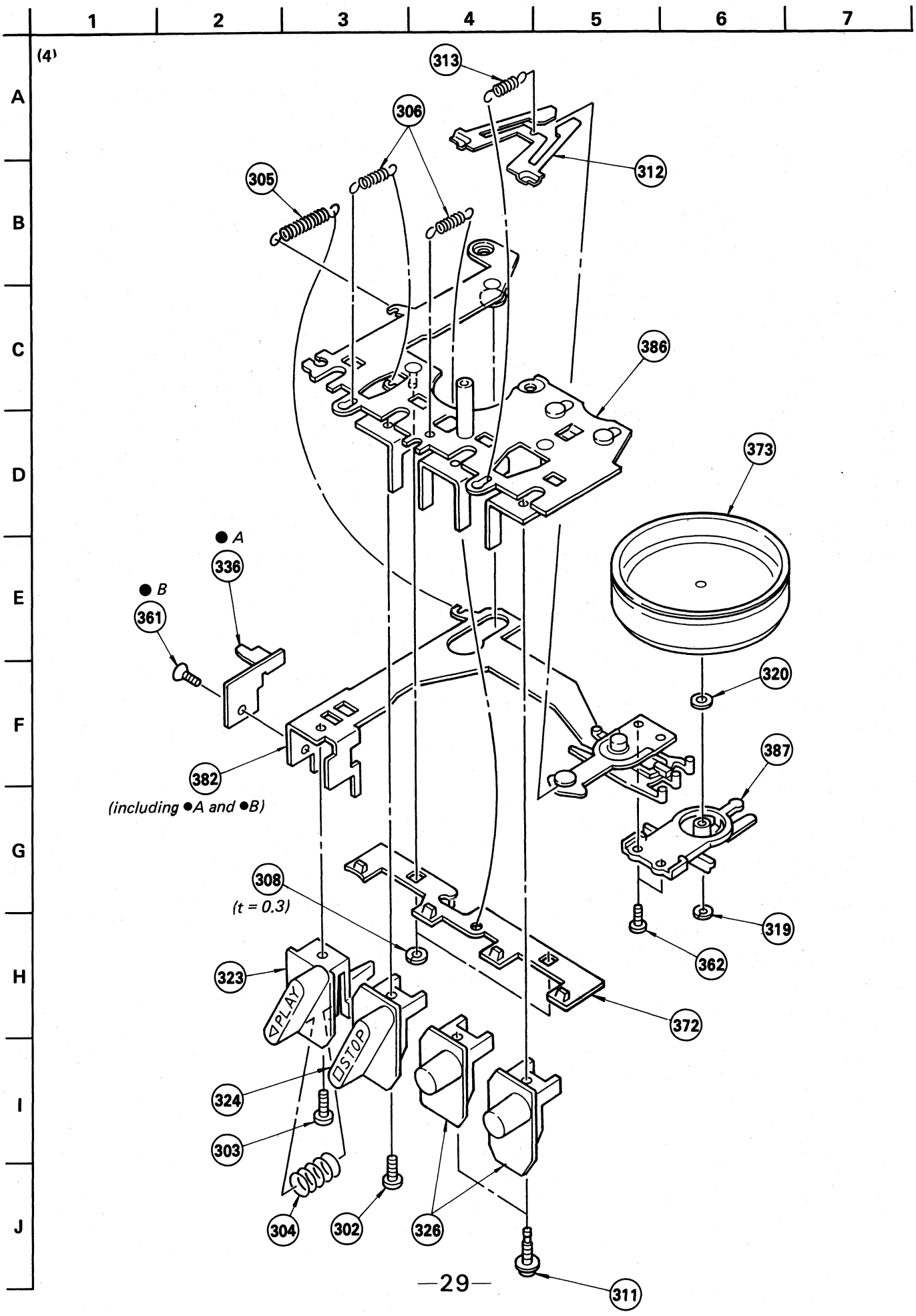
- ▬: B+ bus.
- AC voltage readings in the bias oscillator with a VTVM.
- Total current is measured with no cassette installed.
- In using an electret condenser microphone with a red mark on the side of the case, connect *R102 shown by * in parallel with R101.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (50 kΩ/V).
  ( ) : REC
  (( )) : FF, REW
- Waveforms are taken to ground in PLAY mode by using oscilloscope.
  Voltage variations may be noted due to normal production tolerances.

# SECTION 5
## EXPLODED VIEWS AND PARTS LIST




1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
(2)
316
375
331
325
308
370
332
383
M901
321
370
338
353
374
502
315
365
8
301
364
365
367
350
356
355
359
27
S601
20
337
314
363
365
302
505
343
345
346
341
384
339
376
21
340
27
357
503
CNJ401


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
(3)
27
354
344
381
27
344
379
328
318
322
368
308
358
380
371
327
308
329
385
308
348
330
309
347
317
310
378
333
2
7
366
HE901
377
307
35
308
360
342
352
23
335
27
HRP
334
349
351
369
388


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
(4)
313
306
312
305
386
373
● A
336
● B
361
320
382
(including ●A and ●B)
387
308
(t = 0.3)
319
362
323
372
PLAY
STOP
324
303
304
302
326
311

## GENERAL SECTION

| No. | Part No. | Description |
|---|---|---|
| 1 | 2-299-318-01 | CUSHION |
| 2 | 3-315-306-05 | TERMINAL (A), BATTERY |
| 3 | 3-315-308-00 | SCREW, CONTROL |
| 4 | 3-315-322-00 | KNOB, CONTROL |
| 5 | 3-315-466-00 | SHEET, PANEL |
| 6 | 3-315-467-00 | WASHER, CONTROL |
| 7 | 3-315-480-11 | CLOTH, BATTERY DRAWING |
| 8 | *3-320-348-01 | REFLECTOR |
| 9 | 3-320-379-01 | LEVER, S |
| 10 | 3-320-406-01 | GUARD (B), S |
| 11 | 3-320-382-01 | FOOT, RUBBER |
| 12 | *3-320-386-01 | BRACKET (A), JACK |
| 13 | *3-320-387-01 | BRACKET (B), JACK |
| 14 | 3-320-390-01 | COVER MIC |
| 15 | 3-320-392-01 | RETAINER, SPEAKER |
| 16 | 3-320-393-01 | (For SILVER)...ORNAMENT, JACK |
| 16 | 3-320-393-11 | (BLACK).....ORNAMENT, JACK |
| 17 | 3-320-394-01 | ORNAMENT, MICROPHONE |
| 18 | 3-320-395-01 | HOLDER, MICROPHONE |
| 19 | 3-320-405-01 | CUSHION, SPEAKER |
| 20 | 3-320-413-01 | ORNAMENT (B), REEL |
| 21 | 3-320-421-01 | RETAINER, JACK, D.C |
| 22 | 3-320-422-01 | REIAINER, SPEAKER |
| 23 | 3-703-816-01 | (For SILVER)...SCREW (M1.4) |
| 23 | 3-703-816-02 | (For BLACK)....SCREW (M1.4) |
| 24 | 3-703-925-01 | SCREW (M1.4X7), O NUMBER PWH |
| 25 | 3-831-441-XX | CUSHION |
| 26 | 7-627-451-08 | SCREW, PRECISION +K 1.4X1.6 |
| 27 | 7-627-850-07 | SCREW, PRECISION +P 1.4X2 |
| 28 | 9-910-999-34 | WASHER, STOPPER |
| 29 | X-3320-330-1 | (For SILVER)...PANEL BLOCK ASSY, CONTROL |
| 29 | X-3320-332-1 | (For BLACK)....PANEL BLOCK ASSY, CONTROL |
| 30 | X-3320-331-1 | (For BLACK)....PANEL BLOCK ASSY, CASSETTE |
| 30 | X-3320-333-1 | (For SILVER)...PANEL BLOCK ASSY, CASSETTE |
| 31 | X-3320-326-1 | SLIDER (L) ASSY |
| 32 | *X-3320-327-1 | SLIDER (R) ASSY |
| 33 | X-3320-328-1 | LID ASSY, BATTERY CASE |
| 34 | 3-320-424-02 | SPRING |
| 35 | 3-317-704-01 | SPRING |
| 36 | 9-911-838-XX | CUSHION, METER |
| 37 | 3-703-816-11 | (For SILVER)...SCREW (M1.4X4) |
| 37 | 3-703-816-12 | (For BLACK)....SCREW (M1.4) |
| 38 | 9-911-863-XX | SHEET, FIBER |

## ACCESSORY & PACKING MATERIAL

| No. | Part No. | Description |
|---|---|---|
| 101 | 1-504-090-11 | EARPHONE (ME-L82) |
| 102 | 1-528-052-00 | BATTERY, ALKALINE MANGANIN (AM3) |
| 103 | 3-320-418-01 | (For SILVER)...LABEL, MODEL NUMBER |
| 103 | 3-320-418-11 | (For BLACK)....LABEL, MODEL NUMBER |
| 104 | 3-320-429-01 | CASE, CARRYING |
| 105 | 3-320-433-01 | INDIVIDUAL CARTON |
| 106 | 3-320-435-01 | SPACER |
| 107 | 3-320-436-01 | CUSHION |
| 108 | 3-320-440-01 | STRAP, HAND |
| 109 | 3-320-443-01 | BAG, PROTECTION |
| 110 | 3-527-213-00 | LABEL, SERIAL NUMBER |
| 111 | 3-701-622-00 | BAG, POLYETHYLENE |
| 112 | 3-773-942-11 | (AEP,UK,E)...MANUAL, INSTRUCTION |
| 112 | 3-773-942-21 | (US).....MANUAL, INSTRUCTION |
| 112 | 3-773-942-31 | (Canadian)...MANUAL, INSTRUCTION |
| 113 | 3-703-710-01 | STICKER, SONY SYMBOL |

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

REISITORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA···: μA···, UPA···: μPA···,
UPC···: μPC,
UPD···: μPD···

MECHANISM SECTION

| No. | Part No. | Description |
|---|---|---|
| 301 | 1-548-583-11 | COUNTER, TAPE (SMALL TYPE) |
| 302 | 3-305-528-11 | SCREW, STOPPER |
| 303 | 3-305-528-21 | SCREW, STOPPER |
| 304 | 3-315-331-00 | SPRING, COMPRESSION |
| 305 | 3-315-341-00 | SPRING, TENSION (POWER TENSION) |
| 306 | 3-315-343-00 | SPRING, TENSION (POWER TENSION) |
| 307 | 3-315-357-00 | SPRING |
| 308 | 3-315-384-01 | WASHER, STOPPER (t=0.13) |
| 308 | 3-315-384-11 | WASHER, STOPPER (t=0.25) |
| 308 | 3-315-384-21 | WASHER, STOPPER (t=0.20) |
| 308 | 3-315-384-31 | WASHER, STOPPER (t=0.3) |
| 308 | 3-315-384-41 | WASHER, STOPPER (t=0.35) |
| 309 | 3-315-393-00 | SHAFT, PINCH LEVER |
| 310 | 3-315-394-00 | SPRING |
| 311 | 3-315-395-00 | SCREW, BUTTON |
| 312 | 3-315-396-00 | LEVER (C), F.R |
| 313 | 3-315-397-00 | SPRING, TENSION (POWER TENSION) |
| 314 | 3-315-399-00 | COLLAR, BUTTON |
| 315 | 3-315-404-00 | SCREW |
| 316 | 3-315-405-00 | BELT |
| 317 | 3-315-406-00 | SPRING |
| 318 | 3-315-412-00 | CONTACT, OUTSERT |
| 319 | 3-315-414-01 | WASHER |
| 319 | 3-315-414-11 | WASHER |
| 319 | 3-315-414-21 | WASHER |
| 320 | 3-315-415-00 | WASHER (1.5-2.3) |
| 320 | 3-315-416-00 | WASHER |
| 320 | 3-315-416-01 | WASHER (t=0.1) |
| 320 | 3-315-416-11 | WASHER (t=0.25) |
| 320 | 3-315-416-21 | WASHER (t=0.18) |
| 321 | 3-315-417-00 | BUSHING, CAPSTAN |
| 322 | 3-315-430-00 | REEL GEAR, S |
| 323 | 3-315-432-00 | BUTTON, PLAY |
| 324 | 3-315-435-00 | BUTTON, STOP |
| 325 | 3-315-495-01 | WASHER |
| 325 | 3-315-495-11 | WASHER |
| 325 | 3-315-495-21 | WASHER |
| 325 | 3-315-495-31 | WASHER |
| 326 | 3-317-512-11 | BUTTON, FF |
| 327 | 3-317-701-01 | WASHER |
| 327 | 3-317-701-11 | WASHER |
| 328 | 3-317-702-01 | SPACER (D) |
| 329 | 3-320-338-01 | RETAINER, PAUSE KNOB |
| 330 | 3-320-339-01 | LABEL, PAUSE |
| 331 | 3-320-340-01 | BELT, COUNTER |
| 332 | 3-320-341-01 | GEAR, MIDWAY |
| 333 | 3-320-342-01 | SHAFT, TAPE GUIDE |

MECHANISM SECTION

| No. | Part No. | Description |
|---|---|---|
| 334 | 3-320-343-01 | JOINT (A), E HEAD |
| 335 | 3-320-344-01 | JOINT (B), E HEAD |
| 336 | 3-320-345-01 | PLATE, LOCK, REC |
| 337 | *3-320-346-01 | BRACKET, MOTOR |
| 338 | *3-320-347-01 | BRACKET, FG |
| 339 | 3-320-349-01 | CLAW, REC LOCK |
| 340 | 3-320-350-01 | SPRING |
| 341 | 3-320-351-01 | SPRING, TENSION |
| 342 | 3-320-352-01 | SPRING, COMPRESSION |
| 344 | 3-320-355-01 | SPACER, REC LEVER |
| 344 | 3-320-356-01 | SHAFT, JOINT |
| 345 | 3-320-367-01 | JOINT |
| 346 | 3-320-369-01 | BUTTON, REC |
| 347 | 3-320-370-01 | KNOB, PAUSE |
| 348 | *3-320-410-01 | CHASSIS, HEAD |
| 349 | 3-320-411-01 | CLAMP, LEAD |
| 350 | 3-320-412-01 | WASHER (1.4), SPECIAL |
| 351 | 3-320-414-01 | ORNAMENT (A), REEL |
| 352 | 3-320-419-01 | SPRING |
| 353 | 3-320-420-01 | STOPPER, FR LEVER (C) |
| 354 | *3-320-442-01 | SHAFT, PC BOARD |
| 355 | 3-570-770-00 | CUSHION (A), MOTOR |
| 356 | 3-570-771-00 | CUSHION (B), MOTOR |
| 357 | 3-578-224-11 | WASHER |
| 358 | 3-701-438-01 | WASHER |
| 358 | 3-701-438-11 | WASHER, 2.5 |
| 359 | 3-703-816-01 | SCREW (M1.4) |
| 360 | 7-627-451-28 | SCREW, PRECISION +K 1.4X3 |
| 361 | 7-627-451-37 | SCREW, PRECISION +K 1.4X2 |
| 362 | 7-627-551-47 | SCREW, PRECISION +P 1.4X1.4 |
| 363 | 7-627-552-07 | SCREW, PRECISION +P 1.7X2.5 |
| 364 | 7-627-552-18 | SCREW, PRECISION +P 1.7X1.6 |
| 365 | 7-627-850-07 | SCREW, PRECISION +P 1.4X2 |
| 366 | 7-627-850-37 | SCREW, PRECISION +P 1.4X1.4 |
| 367 | 7-627-850-47 | SCREW, PRECISION +P 1.4X1.6 |
| 368 | 7-627-850-48 | +P 1.4X1.6 |
| 369 | 7-627-850-77 | SCREW, PRECISION +P 1.4X1.8 |
| 370 | 7-627-850-78 | PRECISION SCREW +P 1.4X1.8 |
| 371 | 9-911-838-XX | CUSHION |
| 372 | X-3315-304-1 | PLATE ASSY, LOCK |
| 373 | X-3320-304-1 | WHEEL ASSY, REVERSE |
| 374 | X-3320-307-1 | BRACKET ASSY, COUNTER |
| 375 | X-3320-308-1 | FLYWHEEL ASSY |
| 376 | X-3320-309-1 | ARM ASSY, JOINT, E HEAD |

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CAPACITORS:
MF:μF, PF:μμF.

REISITORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA···: μA···, UPA···: μPA···,
UPC···: μPC,
UPD···: μPD···

## MECHANISM SECTION

| No. | Part No. | Description |
|---|---|---|
| 377 | X-3320-310-1 | GUIDE ASSY, TAPE |
| 378 | X-3320-311-1 | PINCH LEVER ASSY |
| 379 | X-3320-312-1 | CHASSIS ASSY, TAKE-UP REEL |
| 380 | X-3320-313-1 | GEAR ASSY, TAKE-UP REEL |
| 381 | X-3320-315-1 | CHASSIS ASSY, MOTOR |
| 382 | X-3320-316-1 | LEVER ASSY, PLAY |
| 383 | X-3320-317-1 | SLEEVE COMP ASSY |
| 384 | X-3320-318-1 | LEVER ASSY, REC |
| 385 | X-3320-319-1 | CHASSIS ASSY, REEL |
| 386 | X-3320-320-1 | PLATE ASSY, CONTROL |
| 387 | X-3320-329-1 | LEVER (B) ASSY, FR |
| 388 | 7-627-551-27 | SCREW, PRECISION +P 1.4X2.5 |

## ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| 501 | 1-612-596-11 | PC BOARD, FLEXIBLE (A) | | | |
| 502 | 1-612-597-11 | PC BOARD, PHOTO REFLECTOR | | | |
| 503 | 1-613-241-11 | PC BOARD, FLEXIBLE (C) | | | |
| 504 | X-3320-335-1 | PC BOARD (B) ASSY, FLEXIBLE | | | |
| 505 | A-3065-046-A | MOUNTED PCB, SERVO | | | |
| 506 | *A-3070-128-A | MOUNTED PCB, AUDIO | | | |
| C101 | 1-124-413-00 | ELECT | 220MF | 20% | 4V |
| C102 | 1-124-220-00 | ELECT | 33MF | 20% | 4V |
| C103 | 1-135-072-21 | TANTAL. CHIP | 0.22MF | 20% | 35V |
| C104 | 1-163-033-00 | CERAMIC CHIP | 0.022MF | 10% | 25V |
| C105 | 1-163-033-00 | CERAMIC CHIP | 0.022MF | 10% | 25V |
| C107 | 1-135-091-00 | TANTAL. CHIP | 1MF | 20% | 16V |
| C108 | 1-135-103-00 | TANTAL. CHIP | 3.3MF | 20% | 4V |
| C109 | 1-135-083-00 | TANTAL. CHIP | 0.47MF | 20% | 25V |
| C110 | 1-163-105-00 | CERAMIC CHIP | 33PF | 5% | 50V |
| C111 | 1-135-091-00 | TANTAL. CHIP | 1MF | 20% | 16V |
| C112 | 1-163-141-00 | CERAMIC CHIP | 0.001MF | 10% | 50V |
| C113 | 1-163-020-00 | CERAMIC CHIP | 0.0082MF | 10% | 50V |
| C114 | 1-135-104-00 | TANTAL. CHIP | 10MF | 20% | 4V |
| C115 | 1-135-091-00 | TANTAL. CHIP | 1MF | 20% | 16V |
| C116 | 1-135-099-00 | TANTAL. CHIP | 2.2MF | 20% | 6.3V |
| C117 | 1-163-038-00 | CERAMIC CHIP | 0.1MF | | 25V |
| C118 | 1-163-017-00 | CERAMIC CHIP | 0.0047MF | 10% | 50V |
| C119 | 1-124-413-00 | ELECT | 220MF | 20% | 4V |
| C120 | 1-163-093-00 | CERAMIC CHIP | 10PF | 5% | 50V |
| C121 | 1-163-093-00 | CERAMIC CHIP | 10PF | 5% | 50V |
| C122 | 1-135-104-00 | TANTAL. CHIP | 10MF | 20% | 4V |
| C123 | 1-163-038-00 | CERAMIC CHIP | 0.1MF | | 25V |
| C124 | 1-163-038-00 | CERAMIC CHIP | 0.1MF | | 25V |
| C125 | 1-124-413-00 | ELECT | 220MF | 20% | 4V |
| C126 | 1-163-053-00 | CERAMIC CHIP | 0.0033MF | 10% | 50V |
| C127 | 1-163-022-00 | CERAMIC CHIP | 0.012MF | 10% | 50V |
| C128 | 1-163-053-00 | CERAMIC CHIP | 0.0033MF | 10% | 50V |
| C129 | 1-124-413-00 | ELECT | 220MF | 20% | 4V |
| C130 | 1-135-104-00 | TANTAL. CHIP | 10MF | 20% | 4V |
| C131 | 1-124-220-00 | ELECT | 33MF | 20% | 4V |
| C132 | 1-135-103-00 | TANTAL. CHIP | 3.3MF | 20% | 4V |
| C133 | 1-135-104-00 | TANTAL. CHIP | 10MF | 20% | 4V |
| C134 | 1-163-021-00 | CERAMIC CHIP | 0.01MF | 10% | 50V |
| C135 | 1-163-017-00 | CERAMIC CHIP | 0.0047MF | 10% | 50V |
| C136 | 1-124-413-00 | ELECT | 220MF | 20% | 4V |
| C137 | 1-163-038-00 | CERAMIC CHIP | 0.1MF | | 25V |
| C138 | 1-135-091-00 | TANTAL. CHIP | 1MF | 20% | 16V |
| C139 | 1-135-103-00 | TANTAL. CHIP | 3.3MF | 20% | 4V |
| C140 | 1-163-141-00 | CERAMIC CHIP | 0.001MF | 10% | 50V |

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In each case, U : μ, for example:
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UPC···: μPC,
UPD···: μPD···

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | |
|---|---|---|---|---|
| C141 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% | 50V |
| C142 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% | 50V |
| C143 | 1-135-099-00 | TANTAL. CHIP 2.2MF | 20% | 6.3V |
| C144 | 1-135-070-00 | TANTAL. CHIP 0.1MF | 20% | 35V |
| C145 | 1-163-021-00 | CERAMIC CHIP 0.01MF | 10% | 50V |
| C146 | 1-135-103-00 | TANTAL. CHIP 3.3MF | 20% | 4V |
| C147 | 1-163-810-00 | CERAMIC CHIP 0.03MF | 10% | 25V |
| C148 | 1-124-413-00 | ELECT 220MF | 20% | 4V |
| C149 | 1-124-413-00 | ELECT 220MF | 20% | 4V |
| C151 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% | 50V |
| C152 | 1-163-010-00 | CERAMIC CHIP 0.0012MF | 10% | 50V |
| C153 | 1-124-220-00 | ELECT 33MF | 20% | 4V |
| C154 | 1-135-103-00 | TANTAL. CHIP 3.3MF | 20% | 4V |
| C155 | 1-163-013-00 | CERAMIC CHIP 0.0022MF | 10% | 50V |
| C156 | 1-163-013-00 | CERAMIC CHIP 0.0022MF | 10% | 50V |
| C157 | 1-135-099-00 | TANTAL. CHIP 2.2MF | 20% | 6.3V |
| C158 | 1-163-038-00 | CERAMIC CHIP 0.1MF | | 25V |
| C159 | 1-163-081-00 | CERAMIC CHIP 0.22MF | | 25V |
| C160 | 1-163-141-00 | CERAMIC CHIP 0.001MF | 10% | 50V |
| C601 | 1-124-413-00 | ELECT 220MF | 20% | 4V |
| C602 | 1-135-103-00 | TANTAL. CHIP 3.3MF | 20% | 4V |
| C603 | 1-135-104-00 | TANTAL. CHIP 10MF | 20% | 4V |
| C604 | 1-135-070-00 | TANTAL. CHIP 0.1MF | 10% | 35V |
| C605 | 1-163-038-00 | CERAMIC CHIP 0.1MF | | 25V |
| C606 | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% | 50V |
| C607 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% | 50V |
| CNJ401 | 1-507-894-00 | JACK, EXTERNAL POWER | | |
| D101 | 8-719-100-03 | DIODE 1S2835 | | |
| D102 | 8-719-105-58 | DIODE RD3.9M-B2 | | |
| D103 | 8-719-100-93 | DIODE 1S2835 | | |
| D104 | 8-719-100-03 | DIODE 1S2835 | | |
| D401 | 8-719-912-24 | DIODE GL-1PR1 | | |
| D601 | 8-719-908-30 | DIODE DA106K | | |
| HE | 8-825-581-10 | HEAD, E | | |
| HRP | 8-829-375-30 | HEAD, RP (PP183-62C) | | |
| IC101 | 8-759-910-97 | IC BA3410AF | | |
| IC102 | 8-759-017-21 | IC CX-20172 | | |
| IC601 | 8-759-700-07 | IC NJM2903M | | |
| J401 | 1-507-921-00 | JACK (MIC) | | |
| J402 | 1-507-921-00 | JACK (EAR) | | |
| JR1-10 | 1-216-295-00 | METAL CHIP 0 | 5% | 1/10W |
| JR11-28 | 1-216-296-00 | METAL CHIP 0 | 5% | 1/8W |
| L101 | 1-408-946-00 | INDUCTOR CHIP 56UH | | |
| L102 | 1-408-946-00 | INDUCTOR CHIP 56UH | | |

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| M901 | X-3320-334-1 | DC MOTOR (MNR-7200A) ASSY | | | |
| MIC901 | 8-814-184-00 | MICROPHONE UNIT (C-1011) | | | |
| PH601 | 8-719-913-55 | DIODE GP2S04-B | | | |
| Q101 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q102 | 8-729-104-90 | TRANSISTOR 2SA812-M6 | | | |
| Q103 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q104 | 8-729-162-45 | TRANSISTOR 2SB624-BV5 | | | |
| Q105 | 8-729-900-51 | TRANSISTOR DTA114TK | | | |
| Q106 | 8-729-159-64 | TRANSISTOR 2SD596-DV4 | | | |
| Q107 | 8-729-162-45 | TRANSISTOR 2SB624-BV5 | | | |
| Q108 | 8-729-900-98 | TRANSISTOR DTC143TK | | | |
| Q109 | 8-729-800-36 | TRANSISTOR 2SD1048X6 | | | |
| Q110 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q111 | 8-729-162-45 | TRANSISTOR 2SB624-BV5 | | | |
| Q112 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q113 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q114 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q115 | 8-729-800-36 | TRANSISTOR 2SD1048X6 | | | |
| Q116 | 8-729-800-36 | TRANSISTOR 2SD1048X6 | | | |
| Q117 | 8-729-104-90 | TRANSISTOR 2SA812-M6 | | | |
| Q118 | 8-729-900-51 | TRANSISTOR DTA114TK | | | |
| Q119 | 8-729-900-98 | TRANSISTOR DTC143TK | | | |
| Q120 | 8-729-900-98 | TRANSISTOR DTC143TK | | | |
| Q121 | 8-729-900-98 | TRANSISTOR DTC143TK | | | |
| Q122 | 8-729-800-36 | TRANSISTOR 2SD1048X6 | | | |
| Q123 | 8-729-900-51 | TRANSISTOR DTA114TK | | | |
| Q601 | 8-729-101-07 | TRANSISTOR 2SB798-DL | | | |
| Q602 | 8-729-104-90 | TRANSISTOR 2SA812-M6 | | | |
| Q604 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q605 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q606 | 8-729-104-90 | TRANSISTOR 2SA812-M6 | | | |
| Q607 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| Q608 | 8-729-271-22 | TRANSISTOR 2SC2712G | | | |
| R101 | 1-216-049-00 | METAL CHIP 1K | 5% | 1/10W | |
| R102 | 1-216-053-00 | METAL CHIP 1.5K | 5% | 1/10W | |
| R103 | 1-216-033-00 | METAL CHIP 220 | 5% | 1/10W | |
| R104 | 1-216-067-00 | METAL CHIP 5.6K | 5% | 1/10W | |
| R105 | 1-216-079-00 | METAL CHIP 18K | 5% | 1/10W | |
| R106 | 1-216-083-00 | METAL CHIP 27K | 5% | 1/10W | |
| R107 | 1-216-049-00 | METAL CHIP 1K | 5% | 1/10W | |
| R108 | 1-216-113-00 | METAL CHIP 470K | 5% | 1/10W | |
| R109 | 1-216-061-00 | METAL CHIP 3.3K | 5% | 1/10W | |
| R110 | 1-216-033-00 | METAL CHIP 220 | 5% | 1/10W | |
| R111 | 1-216-053-00 | METAL CHIP 1.5K | 5% | 1/10W | |
| R112 | 1-216-067-00 | METAL CHIP 5.6K | 5% | 1/10W | |

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UPD···: μPD···

ELECTRICAL PARTS

| Ref.No. | Part No. | Description | | | |
|---|---|---|---|---|---|
| R113 | 1-216-083-00 | METAL CHIP | 27K | 5% | 1/10W |
| R114 | 1-216-129-00 | METAL CHIP | 2.2M | 5% | 1/10W |
| R115 | 1-216-071-00 | METAL CHIP | 8.2K | 5% | 1/10W |
| R116 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R117 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R118 | 1-216-083-00 | METAL CHIP | 27K | 5% | 1/10W |
| R119 | 1-216-109-00 | METAL CHIP | 330K | 5% | 1/10W |
| R120 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R121 | 1-216-007-00 | METAL CHIP | 18 | 5% | 1/10W |
| R122 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W |
| R123 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W |
| R126 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R127 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W |
| R128 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R129 | 1-216-007-00 | METAL CHIP | 18 | 5% | 1/10W |
| R130 | 1-216-035-00 | METAL CHIP | 270 | 5% | 1/10W |
| R131 | 1-216-113-00 | METAL CHIP | 470K | 5% | 1/10W |
| R132 | 1-216-113-00 | METAL CHIP | 470K | 5% | 1/10W |
| R133 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R134 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W |
| R135 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R136 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R137 | 1-216-121-00 | METAL CHIP | 1M | 5% | 1/10W |
| R138 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R139 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R140 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W |
| R141 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R142 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R143 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R146 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W |
| R147 | 1-216-011-00 | METAL CHIP | 27 | 5% | 1/10W |
| R148 | 1-216-021-00 | METAL CHIP | 68 | 5% | 1/10W |
| R149 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R150 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R151 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W |
| R152 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W |
| R153 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R154 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R155 | 1-216-113-00 | METAL CHIP | 470K | 5% | 1/10W |
| R156 | 1-216-011-00 | METAL CHIP | 27 | 5% | 1/10W |
| R157 | 1-216-109-00 | METAL CHIP | 330K | 5% | 1/10W |
| R158 | 1-216-298-00 | METAL CHIP | 2.2 | 5% | 1/10W |
| R159 | 1-216-298-00 | METAL CHIP | 2.2 | 5% | 1/10W |
| R160 | 1-216-035-00 | METAL CHIP | 270 | 5% | 1/10W |
| R161 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |

ELECTRICAL PARTS

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|---|---|---|---|---|---|
| R162 | 1-216-109-00 | METAL CHIP | 330K | 5% | 1/10W |
| R163 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R164 | 1-216-079-00 | METAL CHIP | 18K | 5% | 1/10W |
| R165 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R601 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R602 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R603 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R604 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W |
| R605 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W |
| R607 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W |
| R608 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R609 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R610 | 1-216-092-00 | METAL CHIP | 62K | 5% | 1/10W |
| R611 | 1-216-091-00 | METAL CHIP | 56K | 5% | 1/10W |
| R612 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R613 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R614 | 1-216-093-00 | METAL CHIP | 68K | 5% | 1/10W |
| R615 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W |
| R616 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W |
| R618 | 1-216-103-00 | METAL CHIP | 180K | 5% | 1/10W |
| R619 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |
| R620 | 1-216-091-00 | METAL CHIP | 56K | 5% | 1/10W |
| R621 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R622 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R623 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W |
| R624 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R625 | 1-216-096-81 | METAL CHIP | 91K | 5% | 1/10W |
| R626 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R627 | 1-216-113-00 | METAL CHIP | 470K | 5% | 1/10W |
| R628 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R629 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W |
| R630 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R631 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R632 | 1-216-113-00 | METAL CHIP | 470K | 5% | 1/10W |
| RV101 | 1-230-466-11 | RES, VAR, CARBON (SMALL) 10K | | | |
| RV601 | 1-230-479-11 | RES, ADJ, METAL GLAZE 47K | | | |
| S101 | 1-554-903-11 | SWITCH, SLIDE (REC/PB) | | | |
| S601 | 1-554-586-00 | SWITCH, LEAF (POWER) | | | |
| S902 | 1-554-669-00 | SWITCH, SLIDE (PAUSE) | | | |
| SP901 | 1-503-356-11 | SPEAKER | | | |
| T101 | 1-433-286-11 | TRANSFORMER, BIAS OSCILLATION | | | |
| T102 | 1-447-864-11 | TRANSFORMER, DC-DC CONVERTER | | | |

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

REISISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA···: μA···, UPA···: μPA···,
UPC···: μPC,
UPD···: μPD···

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